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NAVAL WAR COLLEGE REVIEW

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FOREWORD

The *Naval War College Review* was established in 1948 by the Chief of Naval Personnel in order that officers of the service might receive some of the educational benefits available to the resident students at the Naval War College. The forthright and candid views of the lecturers and authors are presented for the professional education of its readers. Lectures are selected on the basis of favorable reception by Naval War College audiences, usefulness to servicewide readership, and timeliness. Research papers are selected on the basis of professional interest to readers. Reproduction of articles or lectures in the *Review* requires the specific approval of the Editor, *Naval War College Review* and the respective author or lecturer. *Review* content is open to citation and other reference, in accordance with accepted academic research methods. The thoughts and opinions expressed in this publication are those of the lecturers and authors and are not necessarily those of the Navy Department nor of the Naval War College.

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CHALLENGE!

Last December the Naval War College lost two of its most distinguished and dedicated supporters, Adm. Richard G. Colbert and Rear Adm. Richard W. Bates. Each of these officers made an indelible imprint on our college. Each devoted a large measure of his life and endeavor to benefiting the college. We feel a deep loss at no longer being able to turn to them for advice and support. We take great comfort in recognizing that what they accomplished for education at the Naval War College laid a foundation that will guide those who follow them for years to come. The next issue of the *Review* will carry articles on their contributions to the War College and excerpts from their writings.

In this issue the lead article addresses the question of what the missions of the Navy are today. I believe that there is a pressing need to consider this fundamental issue of what the Navy is, and should be all about. Historically, as the article attempts to trace, the missions of navies have evolved with changes in national interests and with new opportunities offered by developments in technology. Today the United States is simultaneously recuperating from the wounds of Vietnam, gingerly exploring *détente*, and watching warily as new challenges appear to be emerging. We in military service must look carefully at which of our missions most suit the tenor of these times. Which of our capabilities is the Nation most likely to call upon us to employ?

At the same time, we also need to take stock of our purpose in life in order to allocate the diminishing resources available to us in the best possible way. Some naval weapons systems are multipurpose and adaptable to numerous applications. No system can be optimized for two purposes. We should attempt to optimize in the most logical way which deep thinking about our objectives will produce.

This article on naval missions will be used as part of the Naval Tactics course at the Naval War College. This course is essentially built around the mission areas defined by the CNO in 1970. It attempts to make the students grapple with these questions of what tasks the Navy should be prepared to perform for the country and how we can best execute those tasks.

STANSFIELD TURNER
Vice Admiral, U.S. Navy
President, Naval War College

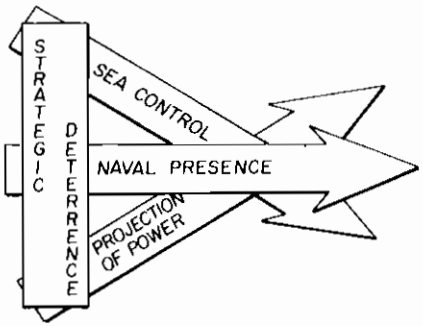
The Chief of Naval Operations has established the Navy's role and "raison d'etre" to be four mission areas—Strategic Deterrence, Sea Control, Projection of Power Ashore, and Naval Presence. An understanding of the rationale for these missions is essential for formulating strategic plans, allocating resources, and developing supporting naval tactics.

MISSIONS OF THE U.S. NAVY

by

Vice Admiral Stansfield Turner, U.S. Navy

President, Naval War College



INTERDEPENDENT NAVAL MISSIONS

USEFULNESS OF CATEGORIZING NAVY MISSIONS

Observers of military affairs will have noted a changed naval lexicon over the past several years. To those accustomed to phrases such as "sea power," "command of the seas," "commerce warfare," and "amphibious warfare," the new terms, "Strategic Deterrence," "Sea Control," "Presence" may seem to be just a new jargon. Not so. Since 1970 there has been a redefinition of traditional U.S. naval roles and missions. The primary purpose of this redefinition is to force the Navy to think in terms of output rather than input.

Why must we emphasize output? First, because a nation of concerned free citizens and skeptical taxpayers is naturally more interested in what is harvested than in what is sown. By measuring the value of output in terms of national objectives, the country can rationally decide what resources it should allocate to the Navy. Input categories such as manpower, ships, aircraft, and training are of little help in trying to determine why we need a Navy or, if we do need one, how big it should be and what it should be prepared to do.

Second, focusing on missions helps tactical commanders to keep objectives in mind. Antisubmarine Warfare (ASW) tacticians often overconcentrate on killing submarines when their ultimate objective is to ensure safe maritime operations. An example of a good sense of objectives was the Israeli achievement of air superiority in the 1967 war. Even though air superiority is traditionally thought of as a function of dogfight tactics, the Israelis recognized that shooting the enemy from the air was not the objective. Destroying Egyptian aircraft was. They employed deep surprise attacks on enemy airfields to successfully achieve this objective.

Third, an amorphous mass of men, ships, and weapons is difficult to manage because it is difficult for an individual to visualize. By subdividing these masses into their expected output, or missions, we are able to establish priorities for allocating resources—to know how much we are spending for different objectives and to judge their consonance with national strategy.

Mission categorization is useful in less abstract decisionmaking also. For instance, we shall propose that the Sea Control mission is executed by tactics of sortie control (barrier operations), chokepoint control, open area operations, and local defense. Different platforms have different utility in each of these tactics. Generally speaking, VP aircraft are best for open area operations, surface escorts best for local defense, and submarines best for chokepoint operations. Although each of these forces has secondary applications, resource distribution among them will be dictated by our evaluation of which tactics are going to be most important to us.

Categorization of mission tactics can also be used at even more detailed levels of resource allocation. A submarine designed for chokepoint operations should emphasize quietness at the expense of speed; a submarine for local or escort defense needs speed even at the expense of quietness. If we understand this, we will trade off speed versus quietness according to our evaluation of probable employment.

Fourth, an understanding of missions assists in selecting the best among several competing systems. A research program may develop five new air-launched munitions, but we may not be able to afford production of more than three. We shall divide tactical air projection tactics into deep interdiction, battlefield support, close air support, and counter air/antiair warfare. Each of these makes slightly different demands for weapons. While precision is mandatory for deep interdiction, it is critical in close air support. Surely in our mix of three new weapons we will want at least one that stresses accuracy. If this seems obvious, an examination of history will show that the military has sometimes become hypnotized by the weapons needed or used in one particular tactic or mission to the neglect of newly emerging requirements.

Finally, stressing missions helps to ensure that members of the organization focus on the whole rather than on one of its parts. This can help keep vested interests in proper perspective. Even the most professional, well-motivated individual can become so committed to a particular missile system, type of ship or aircraft, or special personnel program that he loses sight of what is best for the whole organization.

EVOLUTION OF NAVAL CAPABILITIES AND MISSIONS

How did the Navy come to define the four mission areas as Strategic Deterrence, Sea Control, Projection of Power Ashore, and Naval Presence? It was evolutionary. Navies have not always had each of these missions nor is this likely to be the definitive list of naval missions.

The first and only mission of the earliest navies was Sea Control. A classic example of the importance of being able to move military forces by sea is the Battle of Salamis in 480 B.C. The Persian armies had pushed the Greeks to the wall. The Athenian admiral Themistocles turned the tables by soundly defeating the Persian fleet at Salamis. Cut off from reinforcement and resupply, the Persians left Athens and Attica.

A few decades later, in the Peloponnesian Wars, Athenian Sea Control repeatedly permitted outflanking the land-based Spartan campaign. In the Punic Wars, Rome's exercise of Sea Control prevented the Carthaginians from being able to support Hannibal. And so it went. There were many technological milestones, new tactical concepts, and maritime initiatives, but the basic mission of navies was to ensure the safe movement of ground forces and their supplies across the sea.

In time, trade routes flourished, exploration became more far ranging, the horizons of imperialism widened, commerce grew, and with it, piracy. Nations began to demand security for their endeavors. Broad command of the sea became the *sine qua non* of economic growth and well being. The nature of Sea Control evolved to include the protection of shipping for the nation's economy as well as its overseas military expeditions. By the same token, denial of an enemy's use of the seas for commerce as well as military purposes became an important element of warfare—blockade hurt economies and warmaking potential.

By the early 19th century, another important naval mission had evolved—the projection of ground forces from the sea onto the land. While there are many examples of landing operations throughout military history, amphibious warfare in the modern sense began during the wars of the French Revolution. Examples are the British amphibious assault operations at the Helder (1799) and Aboukir (1801). Ground troops traditionally transported by sea to some staging area began to use sea platforms as combat springboards. A new dimension in tactics was given to commanders in the Projection of Power Ashore through amphibious assault. This also extended the traditional Sea Control mission. In addition to protecting supply reinforcement and economic shipping, navies now had to protect the amphibious assault force.

Also during the 19th century, the term "gunboat diplomacy" came into the naval vocabulary. In the quest for colonies, nations paraded their naval forces to intimidate sheiks and pashas and to serve warning on one another. In time the range of this activity extended from warning and coercion to demonstrations of good will. It has come to be known as the Naval Presence mission. Sea Control, Projection of Power Ashore by amphibious means, and Naval Presence were the missions of navies through the end of World War II.

During that war, naval tactical air was used primarily in the Sea Control mission (e.g., Midway, Coral Sea, and Battle of the Atlantic) and secondarily in direct support of the amphibious assault mission. When the war ended, however, there was no potential challenger to U.S. Sea Control. In essence, the U.S. Navy had too much of a monopoly to justify a continuing Sea Control mission. It was a Navy in quest of new missions. Two arose.

The innovation in missions came from the final stages of World War II, when naval tactical airpower played a role in the bombing of the Japanese home islands. Postwar improvements in aircraft and munitions made it logical to extend this use of naval airpower. In a sense, the tactical air projection mission was born. The Navy staked out its claim to the use of airpower in support of land campaigns: strategic air attack on enemy industry, transportation, and cities; air superiority over the battlefield; and close air support of ground forces. Its value was demonstrated early in the Korean

campaign where there were few alternative means of providing air support ashore.

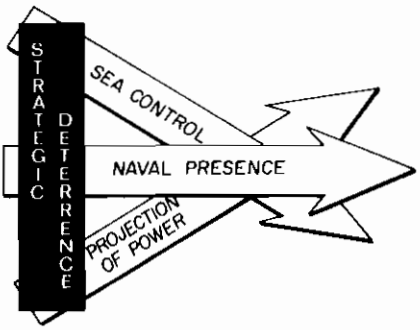
The second innovation in naval missions came with the introduction of Strategic Deterrence as a national military requirement. The combination of improved aircraft performance and smaller packaging of nuclear weapons made the aircraft carrier capable of contributing to this new mission. With the Navy struggling to readjust its missions to peacetime needs and the U.S. Air Force establishing its own place in the military family, it is understandable that there was a sense of competition for this new role. However, by the mid-1960's, the development of the Polaris submarine concept eliminated any question of appropriateness of this mission for the Navy.

At about the same time, the dramatic and determined growth of the Soviet naval challenge caused mission priorities to begin to shift and brought about a resurgence of traditional Sea Control requirements. Today, the balance of naval resources and attention devoted to each of these four missions, Strategic Deterrence, Sea Control, Projection of Power Ashore, and Naval Presence, is especially difficult because of their complex interdependence and because almost all naval forces have multimission capabilities.

The distinction between the four missions is primarily one of purpose. Despite these inevitable overlaps and interdependence, we can understand the Navy far better if we carefully examine each mission individually. We must know what each mission's objectives are so that we do not overlook some useful new tactic or weapon and so that we can strike the proper balance whenever these missions compete for resources.

DEFINITION OF NAVAL MISSIONS AND DISCUSSION OF THEIR FORCES AND TACTICS

Strategic Deterrence Mission



Our strategic deterrence objectives are:

- To deter all-out attack on the United States or its allies;
- to face any potential aggressor contemplating less than all-out attack with unacceptable risks; and
- to maintain a stable political environment within which the threat of aggression or coercion against the United States or its allies is minimized.

In support of these national objectives, we have three principal military "tactics" or force preparedness objectives. The first is to maintain an *assured second strike* capability in the hope of deterring an all-out strategic nuclear attack on the United States. Today that means dissuading the Soviets from starting a nuclear war. We hope to achieve this by maintaining a strategic attack force capable of inflicting unacceptable damage on any enemy even after he has attacked us. The Navy's Polaris/Poseidon/Trident forces are fundamental to this deterrence because of their high nuclear survival probability.

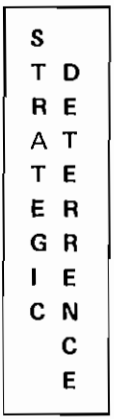
A second tactic is to design our forces to ensure that the United States is not placed in an unacceptable position by a partial nuclear attack. If the Soviets attacked only a portion of our strategic forces, would it then make sense for the United States to retaliate by striking Soviet cities, knowing that the Soviets still possessed adequate

forces to strike our cities? In these circumstances do we need an alternative of *controlled response?* This means making our strategic strike forces quickly responsive to changes in targeting and capable of accurate delivery. SSBN forces can be well tailored to these requirements.

A third objective is to *deter third powers* from attacking the United States with nuclear weapons. Because of the great disparity between any third country's nuclear arsenal and ours, the same forces deterring the Soviet Union should deter others.

Finally, we maintain a quantity and quality of strategic forces which will not let us appear to be at a disadvantage to the Soviet Union or any other power. If we were to allow the opinion to develop that the Soviet strategic position is markedly superior to ours, we would find that political decisions were being adversely influenced. Thus we must always keep in mind the *balance of power image* that our forces portray to the non-Soviet world. In part, this image affects what and how much we buy for strategic deterrence. In part, it affects how we talk about our comparative strength and how we criticize ourselves.

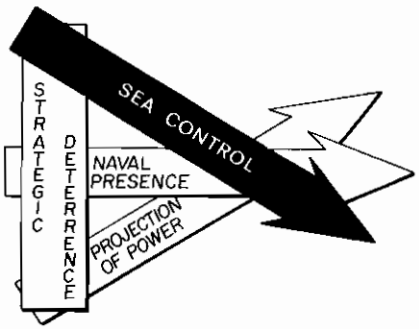
In summary, the strategic deterrence mission is subdivided into four tactics:



- Assured Second Strike
- Controlled Response
- Deter Third Powers
- Balance of Power Image

There is very little overlap between strategic deterrence and other Navy mission areas at present. However, significant improvements in enemy ASW technology could reduce the ability of SSBN's to survive without assistance from friendly Sea Control forces. With this exception and the fact that aircraft carriers still possess the potential for nuclear strikes, naval forces for strategic nuclear deterrence are almost exclusively devoted to that mission.

Sea Control Mission



The term "Sea Control" derives from the traditional phrase "control of the sea." This change in terminology may seem minor, but it is a deliberate attempt to acknowledge the limitations on ocean control brought about by the development of the submarine and the airplane.

In the 18th and 19th centuries, we passed through a period of maritime history in which full regulation of the seas in wartime was the ambition of Great Britain. Initially, this could be accomplished through possession of a superior sailing fleet. The enemy's harbors were closely watched by patrolling cutters and frigates. Ships of the line were called forth to defeat the enemy or at least to force him back into port whenever he dared to sortie. Later, when steam propulsion afforded ships greater mobility, the British found that they needed both coaling stations and control of vital chokepoints around the world. The intention was still to be able to move a superior fleet into position for a showdown engagement before an enemy had the opportunity to use the seas for his advantage. The term "control of the sea," as used by Mahan, meant both denying use of the seas to the enemy and asserting one's own use.

British and German naval strategies in World War I reflected this heritage. Both navies believed that a decisive encounter of their battle fleets would determine control of the seas. Hence caution dominated the tactics of Jutland. Germany challenged British reliance on a superior battle fleet by first employing surface ship commerce raiders, then by unrestricted submarine warfare. The British reacted by attempting to blockade the German U-boat with mines laid across the exit to the North Sea. It failed. Few naval strategists understood how radically the concept of "control of the seas" was altered by the advent of the submarine. British, German, Japanese, and American preparations for World War II all concentrated on potential battle fleet actions. Only a few voices pointed out that an additional submarine might be more useful than another battleship or two.

Equally few strategists forecast the dominant role that control of the air over a surface fleet would have. However, in March 1941, off Cape Matapan in Greece, the first engagement of major surface forces since Jutland demonstrated that it was the presence of a British aircraft carrier that allowed an otherwise weaker force to prevail. By the end of World War II the idea of totally denying the seas to one's enemy while asserting one's own exclusive use had been overtaken by technology. On the one hand it was nearly impossible to deny an enemy submarine fleet access to the seas; on the other, there were likely to be areas of the sea where enemy airpower would make the assertion of one's presence prohibitively costly. Yet, for the first several decades after the second World War, the U.S. Navy had such a monopoly on seapower that the term "control of the seas" understandably continued to carry its long established connotation.

The new term "Sea Control" is intended to connote more realistic control in limited areas and for limited periods of time. It is conceivable today to temporarily exert air, submarine, and surface control in an area while moving ships into position to project power ashore or to resupply overseas forces. It is no longer conceivable, except in the most limited sense, to totally control the seas for one's own use or to totally deny them to an enemy.

This may change with evolving technology and tactics but, in the meantime, we must approach the use of the term "Sea Control" from two directions: *denying* an enemy the right to use some seas at some times, and *asserting* our own right to use some seas at some times. Any seapower may assert its own right to use the seas and deny that right to the enemy at any given time. Its efforts will usually be divided between the two objectives. For instance, in figure 1, if the United States were attempting in wartime to use the North Atlantic to reinforce Europe, it would be operating near the left side of the diagram with the greater percentage of its effort on asserting Sea Control. In a situation like the Vietnam war, we operated on the right extreme, since our use of the seas was not challenged, but we did make a substantial

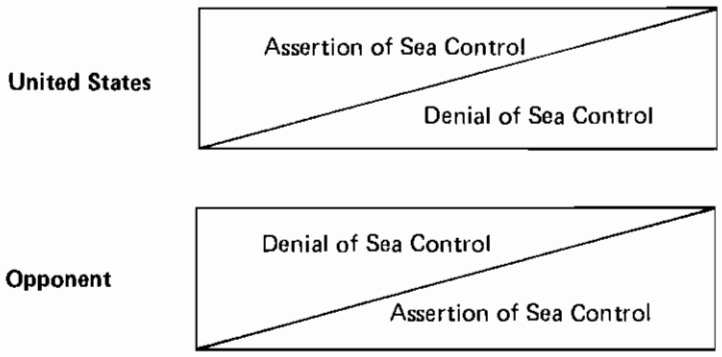


Figure 1

effort to deny the other side access to Haiphong. An opponent, of course, will usually respond with countering objectives and tactics as in the lower half of the figure.

Four U.S. national objectives which call for asserting our use of the sea and, by the same token, denial of them to an opponent are:

- To ensure industrial supplies.
- To reinforce/resupply military forces engaged overseas.
- To provide wartime economic/military supplies to allies.
- To provide safety for naval forces in the Projection of Power Ashore role.

There are four different tactical approaches for achieving these Sea Control objectives:

Sortie Control. Bottling up an opponent in his ports or on his bases can still be attempted. As opposed to the 18th and 19th century tactic of forcing a major fleet engagement at sea, today's blockade seeks destruction of individual units as they sortie. If we assume an opponent will be in control of the air near his ports, sortie control tactics must primarily depend on submarines and mines.

If successful, *sortie control* is a most economical means of cutting off a nation's use of the seas or ability to interfere. Nevertheless, such established techniques have their disadvantages. No blockade is 100 percent successful. Some units may be beyond the blockade when hostilities commence and will remain to haunt opposition forces. Against the enemy's aircraft there is no static defense. Planes must be bombed at their bases. Thus we must conclude that blockades are weapons of attrition requiring time to be effective. But the lesson of history is perhaps the most instructive of all—ingenious man has usually found ways to circumvent blockades.

Chokepoint Control. Sometimes the best place to engage the enemy is in a geographical bottleneck through which he must pass. In so doing, platforms like ASW aircraft that probably could not survive in the area of the enemy's sortie point can be used. This also requires patience. For those enemy forces that have cleared sortie and chokepoint operations, there are two remaining tactics for dealing with them.

Open Area Operations. Once the enemy is loose at sea or in the air, surveillance and search systems can assist in locating and putting him at bay. Aircraft are perhaps the most appropriate platform because of high search rates. Here again, though, time and patience are required.

Local Engagement. In contrast to searching out a large area, we can let the enemy come to us. If we are asserting our use of the seas this means that his attacking aircraft, ships, and/or submarines must close our forces to within weapon release range. This enables us to concentrate our defensive forces around the units to be protected. Defensive forces may consist of surface escorts, submarines, and whatever aircraft can be brought to the scene—VP, VS, VF, and VA. These forces may attempt to destroy the enemy's launching platform prior to weapon release or may attempt to deflect or destroy the attacking weapons themselves. If we are denying use of the seas to someone else, *local engagement* amounts to positioning forces in a limited region and then preying upon the enemy.

The weapons employed in these four tactics are numerous, their selection depending on timing and the situation. The same weapon may be used to assert our control or to deny control to an opponent. This multimission character of many weapons systems often causes misunderstanding of the boundary between Sea Control and the other naval missions. Figure 2 shows the weapons systems applicable to specific Sea Control tactics.

WEAPONS SYSTEMS APPLICABLE TO SEA CONTROL TACTICS

Weapons Systems / Tactics	Sortie Control	Chokepoint Control	Open Area Operations	Local Defense
Submarines	X	X	X	X
ASW Aircraft		X	X	X
Fighter Aircraft		X		X
Surveillance Systems	X	X	X	X
Attack Aircraft	X	X		
Mines	X	X		
Escort Ships	X	X	X	X

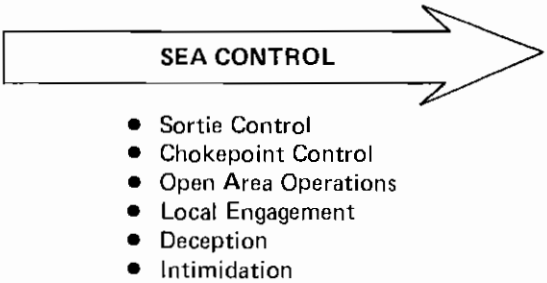
Figure 2

In executing Sea Control tactics, two passive techniques deserve particular mention:

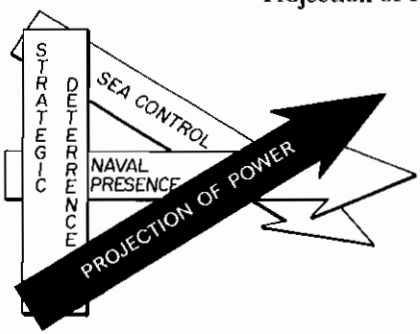
Deception. Assertive Sea Control objectives do not necessarily demand destruction of the enemy's force. If the enemy can be sufficiently deceived to frustrate his ability to press an attack, we will have achieved our Sea Control objective. Force routing, deceptive/imitative devices, and other antisearch techniques can be employed, often in combination with other tactics.

Intimidation. The perceptions of other nations of our Sea Control capability relative to that of other major powers can influence political and military decisions. What any nation says about its capabilities influences the challenges that are offered or accepted.

In summary, sea control tactics include:



Projection of Power Ashore Missions



Sea Control is concerned with what happens on, under, and over the ocean surface. Projection of Power Ashore is concerned with the impact of naval forces on land forces and can be divided into three categories: amphibious assault, naval bombardment, and tactical air.

Amphibious Assault Projection. Ships have long been used to transport military power to conflict areas. As noted earlier, assault from the sea in the face of opposition began to develop as a naval mission in the early 19th century. The calamitous assault at Gallipoli in 1915 and subsequent failure to distinguish poor execution from good strategy lowered enthusiasm for this mission. However, World War II and the Korean conflict testified to its continuing importance.

Amphibious assaults are opposed landings on hostile territory and have four objectives:

- To secure territory from which a land campaign can be launched and supported. We do this by assault from the sea in several circumstances. One is when there is no other practical approach, that is, the enemy territory is a geographical or political island. Another is when we want to outflank and surprise the enemy. The Okinawa and the Normandy landings in World War II are examples. The purpose of the assault on Okinawa was to secure a base from which to launch the invasion of Japan. In Normandy the assault launched the attack into heartland Germany.
- To secure land area from which an air operation can be launched and supported. One of the costliest amphibious assaults during World War II was launched against Iwo Jima to gain a site from which the Air Force could strike Japan.
- To secure selected territory or facilities to prevent enemy use of them. The first offensive action of World War II in the Pacific was the capture of Guadalcanal to deny the Japanese the airfield facilities from which they could interdict U.S. supply routes between Pearl Harbor and Australia.
- To destroy enemy facilities, interrupt his communications, divert his effort, et cetera, by means of amphibious raids with planned withdrawal.

Amphibious tactics are classified by the size of the operation, as indicated in figure 3.

COMPARISON OF AMPHIBIOUS TASK ORGANIZATIONS

	MAF*	MAB*	MAU*	Raid
Troops	To 33,000	8000-12,000	1800-4000	50-250
Ships	43-52	15-17	4-6	1-2
Helos	250-300	75-120	30-36	10-14
Attack Aircraft	50-60	18-20	6-8**	2-4**
Boats	320-350	80-100	30-40	2-10
Gunfire Support	8-10 8"			
	22-30 5"/54	12-14 5"/54	2-4 5"/54	0-3 5"/54

*MAF – Marine Amphibious Force
MAB – Marine Amphibious Brigade
MAU – Marine Amphibious Unit
**VTOL

Figure 3

These rough force compositions are by no means rigid. There are many specific ways in which amphibious assault forces can be tailored to the particular requirements at hand. Obviously the landing force must be adequate in size to handle the tasks assigned ashore. As the size of an assault increases, there are two factors that scale upward more than proportionally to the number of troops to be landed. One is the number of specialized units that are required such as command, control, and communications ships or facilities; minesweeping capability; aircraft and gunfire support. The other factor is the time to assemble, sail, prepare the landing area and assault. The larger the operation the more complex it becomes with attendant delays and risks of enemy advance defensive preparations.

Finally, when little or no opposition is encountered, such as in Lebanon in 1958, amphibious forces can be landed "administratively." They can then be employed as regular ground forces if supported. Administrative landings are considered amphibious operations only when the unique over-the-beach capability of amphibious force is an essential element.

Naval Bombardment. Although most commonly associated with amphibious assault, bombardment can have three separate objectives:

- To provide direct support to troops operating near a coastline.
- To interdict movements along a coastline.
- To harass military or civil operations in coastal areas.

Bombardment is presently available from naval guns in destroyers and cruisers. There are two tactics, either direct or indirect fire control can be employed depending on the distance of the ship and target from shore. Targets can be prearranged geographically, called by observers on the beach, or selected visually from a ship or aircraft. The accuracy of fire can be spotted from on board ship, from ashore, or from an aircraft. In time, even conventionally armed missiles may also be employed in this role.

Tactical Air Projection. Tactical airpower is used to achieve three objectives:

- Destroy portions of the enemy's warmaking potential.
- Provide support to a ground campaign directly or by interdicting enemy support to the engaged areas.

- Deny an enemy these same options against us.

There are four basic tactics by which these objectives are achieved: *deep interdiction, battlefield interdiction, close air support,* and *counterair/antiair warfare.*

Deep Interdiction. Attacks conducted to destroy, neutralize, or impair the enemy's military potential before it can be directed against friendly forces are *deep interdiction.* Targets assigned may be military or civilian, remote from the battle area, and perhaps more strategic than tactical. To prevent the enemy from moving forces and material under the protective cover of darkness or adverse weather, an all-weather attack capability is important.

Battlefield Interdiction. Sometimes referred to as Direct Air Support (DAS), *battlefield interdiction* differs from deep interdiction in two ways: targets are usually military and of immediate tactical importance and airspace control must be closely coordinated with frontline support operations. Sustained battlefield interdiction can restrict the enemy's capability to move supplies/reinforcements or maneuver his forces.

Close Air Support. Providing direct support to frontline ground forces, *close air support* is generally exercised in a similar manner as call-fire support from field artillery. Therefore, very close coordination with gunfire support elements is necessary.

Counterair/Antiair Warfare. In order to conduct the three types of air strike operations, *counterair* forces are employed to neutralize the enemy's air capabilities to minimize expected attrition of our forces. The threat over enemy territory may be surface-to-air missiles (SAM's), antiaircraft guns (AAA) and/or fighter interceptor aircraft. Counters to these range from attack on enemy airbases or weapons sites to direct protection with our fighters or electronic countermeasures. When the situation is reversed and an opponent is projecting his airpower over our territory, antiair warfare operations come into play. Fighters, SAM's, and AAA are employed exacting attrition on enemy aircraft.

All of these tactical air projection tactics are carried out by attack aircraft supported as feasible and necessary by fighter-interceptor air superiority forces. One of the values of categorizing air projection missions is to identify the aircraft and weapon characteristics and tactics best suited to each mission. Figure 4 does this with some of the principal aircraft and weapon characteristics. There will be specific scenarios where some of the judgmental evaluations in figure 4 will be incorrect. It would be desirable to be infinitely flexible and have maximum characteristics in all aircraft and weapons. Unfortunately, the laws of both physics and economics prevent that. Hence, some evaluation of probable use and likely need can be valuable.

Before leaving the projection mission, we would note that only a fine distinction separates some aspects of the Sea Control and Projection of Power Ashore missions. Many weapons and platforms are used in both missions. Amphibious assaults on chokepoints or tactical airstrikes on enemy airbases can be employed as a part of the Sea Control mission. Sea-based tactical aircraft are used in Sea Control missions for antiair warfare and against enemy surface combatants. The distinction in these cases is not in the type of forces nor the tactics which are employed, but in the purpose of the operation. Is the objective to secure/deny use of the seas or is it to directly support the land campaign? For instance, much of the layman's confusion over aircraft carriers use stems from the impression that they are employed exclusively in

AIRCRAFT AND WEAPON CHARACTERISTICS FOR TACTICAL AIR PROJECTION MISSIONS

(H-high; M-medium; L-low)

	Deep Interdiction	Battlefield Support	Close Air Support	Counterair
Aircraft				
Speed	H	M	L	H
Maneuverability	H	M	H	H
Range	H	M	L	M
Endurance	M	M	H	M
All Weather	H	M	L	M
Sophisticated Weapons Delivery System	H	M	M	–
ECM Capability	H	M	L	H
Weapons Payload	H	M	M	–
Weapons				
Long Range	H	M	L	M
Large Warhead	H	M	L	L
Antipersonnel	L	M	H	–
Antimaterial	H	H	H	–
Sophisticated (Smart)	H	M	L	–

Figure 4

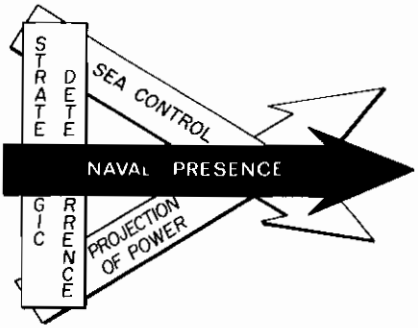
the Projection of Power Ashore role. Actually, from the Battle of Cape Matapan through World War II, aircraft carriers were used almost exclusively to establish control of the ocean's surface. Today they clearly have a vital role to play in both the Sea Control and Projection of Power missions.

In summary, Projection of Power Ashore Tactics are:

PROJECTION OF POWER ASHORE

- Amphibious Assault
  - Marine Amphibious Force
  - Marine Amphibious Brigade
  - Marine Amphibious Unit
  - Raid
- Naval Bombardment
  - Direct
  - Indirect
- Tactical Air
  - Deep Interdiction
  - Battlefield Interdiction
  - Close Air Support
  - Counterair/Antiair

Naval Presence Mission



Simply stated, the Naval Presence mission is the use of naval forces, short of war, to achieve political objectives. The use of presence forces is for two broad objectives:

- To deter actions inimical to the interests of the United States or its allies.
- To encourage actions that are in the interests of the United States or its allies.

We attempt to accomplish these objectives with two tactics: *preventive deployments* and *reactive deployments*. The key difference is whether we initiate a show of presence in peacetime (preventive) or whether we are responding to a crisis (reactive). In a preventive deployment our force capabilities should be relevant to the kind of problems which might arise and clearly cannot be markedly inferior to some other naval force in the neighborhood, but can rely to some extent on the implication that reinforcements can be made available if necessary. On the other hand, in a reactive deployment any force deployed needs to possess an immediately credible threat and be prepared to have its bluff called. If another seapower, such as the Soviet Union, is in the area, a comparison of forces will be inevitable.

In deciding to insert a presence force, we must consider what size and composition of force is appropriate to the situation. There are basically five actions with which a Naval Presence force can threaten another nation:

- Amphibious assault
- Air attack
- Bombardment
- Blockade
- Exposure through reconnaissance

In addition, almost any size and type of presence force can imply that the United States is concerned with the situation and may decide to bring other military forces to bear.

All too often, especially in reactive deployments, we tend to send the largest and most powerful force that can move to the scene rapidly. The image created may not be appropriate to the specific problem. For instance, the threat of major air attack on a small oil sheikdom would not be credible, but the threat of an amphibious assault on the capital might be; or, sailing a major fleet to show support for a small government threatened with insurrection might be more unsettling than stabilizing, perhaps prompting overreaction.

When selecting a *Naval Presence* force, we must also take into account how the countries that we want to influence will perceive the situation. There are three distinctly different categories of national perceptions:

The Soviet Union. When contemplating a U.S. presence force, the Soviets must assess their comparative naval strength available over time and the expected degree of U.S. resolve. Their principal strength comparison would probably be on which country can exercise Sea Control in the area in question since the United States is not likely to pose a threat of projecting power directly against the U.S.S.R., except in a worldwide crisis of the most serious proportions.

Nations Allied to the Soviets. Nations with close ties to the Soviets must assess relative United States–U.S.S.R. capabilities in the particular circumstances. These powers will be asking the questions, "Can the United States project its assembled power onto my shores?" and "Can the U.S.S.R. deny them that capability?" Thus third nation appraisal of relative Sea Control strengths may be the most critical factor. We should note, however, that third power assessments may not correspond to the assessments either we or the Soviets would make of identical military factors.

Unaligned Third Nations. There will be cases where a nation is not able to invoke major power support in a dispute with the United States. The perceptions of such a country would likely focus on U.S. capability and will to project its power ashore to influence events in that country itself.

Thus, the Naval Presence mission is simultaneously as sophisticated and sensitive as any, but also probably the least understood of all Navy missions. A well orchestrated Naval Presence can be enormously useful in complementing diplomatic actions to achieve political objectives. Applied deftly but firmly, in precisely the proper force, Naval Presence can be a persuasive deterrent to war. If used ineptly, it can be disastrous. Thus, in determining presence objectives, scaling forces, and appraising perceptions, there will never be a weapons system as important as the human intellect.

In summary, the tactics of the Naval Presence mission are:

- Preventive Deployments
- Reactive Deployments

CURRENT AND FUTURE ISSUES INVOLVING NAVAL MISSIONS AREAS

The United States, as we have seen, has performed the four basic naval missions for many years. Yet the dynamic nature of world conditions demands a continuing reassessment of the relation of one mission to another and the comparative emphasis on their individual tactics. National priorities change; the nature of the threat changes. Only by understanding the complex interdependence between naval missions and their elements can we expect to be able to allocate resources wisely and prepare for the future rather than the past.

Some of the key issues which must be addressed are:

Intramission Issues

Strategic Deterrence

- Can we maintain our *balance of power image* and accent *controlled response* without appearing to be developing a first strike capability?

Sea Control

- Will probable scenarios allow time for attrition tactics?
- Can *local engagement* forces be made more effective?
- Should future SSN's be designed for employment in barriers (attrition) or as escorts (local engagement)?

Projection of Power Ashore

Amphibious Assault–

- What size assault force is most likely to be needed?
- Should we design lift forces and tactics differently for different size assaults?

Naval Bombardment–

- Should the vanishing 6-inch and 8-inch guns be replaced?
- Is there a place for bombardment by nonnuclear missiles?

Tactical Air–

- How much high performance capability is needed for–or can we afford–deep interdiction?
- What tactical application could V/STOL aircraft best fulfill?
- In what way are electronic warfare requirements influenced by the different tactics?

Naval Presence

- Are there different operating policies that would yield a greater presence capability?

Intermission Issues

Strategic Deterrence vs. General Purpose Forces

- How much of the Navy's resources belong in Strategic Deterrence?
- Should sea-based missiles be favored over the other elements of the TRIAD and assume a greater role in Strategic Deterrence?

Sea Control vs. Projection of Power

- Does the increased size of the Soviet Navy signal the end of our freedom to project power from sea sanctuaries and justify shifting more resources into Sea Control?
- Did our Vietnam experience diminish the probability of future projection wars?
- Are "Lo-mix"* Sea Control forces incompatible with the Projection of Power?

Presence vs. Combative Missions

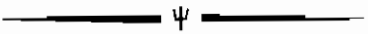
- Is the Presence mission becoming sufficiently important to warrant building or designing forces for that purpose?

Obviously we cannot resolve these issues of inter-mission priority in a vacuum. We must consider both what our national political objectives are and what any potential opponent is doing. Our principal military concern, of course, is the growing Soviet Navy. The evolution of their post-World War II navy would indicate that they started with a *sea denial* orientation as evidenced by their emphasis on submarines. There are those who argue that this was intended only to deny us access to waters from which we could project power into the Soviet Union. There are others who contend that their *sea denial* capability now includes being able to interdict our resupply operations over a wide span of oceans. It also seems clear that the Soviet Navy has chosen to exercise its Naval Presence capabilities aggressively. Whether they look on this as a fallout of their other capabilities or have done so deliberately is difficult to

*When we think in the accustomed terms of projection of power from sea sanctuaries, we incline toward larger, more cost–effective, and more efficient platforms (the "hi" of the "hi-lo mix"). Sea Control favors numbers of units because operations will likely spread to numerous areas; the "Lo" side of the mix.

assess. With the advent of Soviet aircraft carriers and the continuing expansion of their amphibious forces, there is a growing question of whether they have ambitions for Projection of Power Ashore capability. If so, it would logically be accompanied by assertive Sea Control capabilities to defend their projection forces. Even smaller nonallied navies, such as the Chinese, must be taken into account. They, as the Soviets, are starting with a sea denial orientation. With relatively simple sea denial weapons such as antiship missiles and mines proliferating and extending in reach, the threat of sea denial in restricted waters from even the smallest navies may well increase in the future.

There will always be this constant flow and counterflow of mission emphasis and tactical adaptation. Perhaps it is even more accentuated today than in the past. On the one hand, the pace of technological innovation is forcing this. On the other, the changing nature of world political relationships demands a continual updating of naval capabilities to support national policy. Naval officers, as professionals, must understand the Navy's missions, continually question their rationale, and provide the intellectual basis for keeping them relevant and responsive to the Nation's needs. Unless we do, we will be left behind attempting to use yesterday's tools to achieve today's objectives.



The unresting progress of mankind causes continual change in the weapons; and with that must come a continual change in the manner of fighting.

Mahan, 1840-1914

The Gorshkov articles represent a "window" into the planning offices of the Soviet Navy. Admiral Gorshkov speaks from a background of vast experience and from a position of authority. He presents a clear message that the Soviet Navy is no mere transitory phenomenon on the world's maritime stage.

THE MEANING AND SIGNIFICANCE OF THE GORSHKOV ARTICLES

A research paper prepared for the
Naval War College Strategy Study
by

Commander Clyde A. Smith, U.S. Navy

Introduction. The Gorshkov series represents 11 articles which appeared in *Morskoy Sbornik*, the Soviet *Naval Digest*, from 1972 into 1973.[1] The entire series was entitled "Navies in War and Peace" and consisted of 50,000 words of sustained, forceful prose. The author of the work is Adm. Sergey Georgievich Gorshkov[2] who, since 1956, has been the Commander in Chief of the Soviet Navy and who has reputedly enjoyed the trust and confidence of both Khrushchev and Brezhnev. He is the architect of the modern Soviet Navy and is, by this accomplishment alone, the most distinguished naval officer that Russia, the great landpower, has yet produced. Without a doubt the Gorshkov articles are by far the most significant and comprehensive pronouncement on seapower ever to come out of Russia. Because of their breadth, because of their authorship, because of their publication in the professional naval journal of the Soviet Navy, and because they have occurred at a time when historic shifts in the distribution of naval and world power are in progress, these papers merit a most careful consideration.

The general title of the series and the subtitles listed below suggest the general content and comprehensive nature of the writings.

- [Navies in War and Peace] No subtitle (Ed.)
- Russia's Difficult Road to the Sea
- Into the Oceans on Behalf of Science
- The First World War
- The Soviet Navy
- The Building of the Navy (1928-1941)
- The Second World War
- The Soviet Navy in the Great Patriotic War
- The Basic Missions Executed by Navies in the Course of the Second World War
- Navies as a Weapon of the Aggressive Policy of the Imperialistic States in Peacetime
- Some Problems in Mastering the World Ocean

Gorshkov's announced purpose for publishing the series was to "foster the development in our officers of a unity of views on the role of navies under various historical conditions" and "to determine the trends and regularities in the role and place of navies in war, and also their peacetime use as an instrument of state policy."[3] It is an official interpretation of Russian naval history, and while it is by no means objective history, it serves admirably as a vehicle for Gorshkov's ideas. In his description of history and historical lessons, it becomes obvious that he intends to present modern analogies and that he wishes these to be abundantly clear. Throughout this book-length naval history, Gorshkov constantly reiterates the vital necessity for having large modern naval forces, both for use in war and in peace. Benefits deriving from such a navy have been great, penalties for not having such a navy severe. The tone of the articles is assertive, at times polemical; and while it is apparent that Gorshkov is under pressure from budget constraints, the army, and possibly SALT negotiators, he seems self-assured with the situation. He justifies a larger, more balanced navy by advancing, seemingly, every conceivable argument, including the protection of state interests and the requirements for a modern version of gunboat diplomacy. The articles provide a powerful rationale for expanded Soviet seapower that is often Mahanian in the force of its appeal and in its urgency.

Nevertheless, a search for the real reason *why* the series was written ultimately resolves into the question: "Is it announcement, or is it advocacy?" Is Gorshkov *announcing* that a new, long-term naval program to construct a larger, even more modern navy has already been approved? Is he then acting as the spokesman for this decision, providing explanation and rationale to support it? Or is he *advocating* a large and modern navy in an ongoing defense debate in which substantial criticism of such a fleet exists? Is he then rebutting critics, arguing for a favorable, yet to be made decision on the size and role of the future Soviet Navy? The contention of this commentary is that Gorshkov is announcing a decision already taken. At the same time, he is using the series as a forum to rebut critics and the various arguments they have advanced. On basic questions he seems to be making authoritative pronouncements. Not only does he announce continued expansion of Soviet naval power, but he announces the continued growth of Soviet seapower in other areas—merchant marine, fishing fleet, oceanography, and even ocean mining and ocean exploitation in general. Accepting this "announcement" interpretation, the Gorshkov series is a significant forewarning of the future magnitude of the total Soviet maritime effort and of the challenge it represents to Western seapower.

An acknowledged Soviet custom calls for the most authoritative person available to treat comprehensively any important subject on which an official position has not been established previously. Ideally, this authority should be a professional man in a high official position. Admiral Gorshkov—a member of the Central Committee of the Communist Party, a Deputy Minister of Defense, and the Commander in Chief of the Soviet Navy—is admirably suited to deal with naval strategy. Therefore, while some of Gorshkov's conclusions are questionable and a bit contrived, they do reflect the Soviet Navy's official view of the lessons of history on seapower.

It is unlikely that Gorshkov established this official interpretation of history solely to justify larger appropriations for the navy or solely to preserve allocations at present levels, although these elements are present in the series. His routes for appropriations are through either the Politburo, the Cen-

tral Committee of the Communist Party of the Soviet Union, the General Staff, the Ministry of Defense, or the Council of Ministers or a combination of these. An appeal for appropriations through the pages of *Morskoy Sbornik* would not only be futile under the Soviet system, but unthinkable as well. Publication of the series seems to reflect a Soviet command desire to acquaint as many Soviet officers as possible with the official interpretation as the reasoning behind current and forthcoming naval developments.

The main idea, the constantly recurring theme in the Gorshkov series, is that the Soviet Union requires a large, modern, and powerful navy commensurate with her global interests, both in war and in peace. He provides what purports to be a historical review of Soviet naval power, reinterpreting history as necessary to support his view. This historical review contains numerous and intended modern-day analogies, each supporting his view that a large and modern navy is an essential power ingredient of the Soviet state. Once he has established the general requirement that such a navy is needed in war and peace, he then discusses Soviet naval requirements and the uses of naval power in war and peace in present and past contexts. Lesser themes recur sporadically throughout the series. But before examining this central idea, as well as the diffuse lesser themes, it is necessary to look first at the strategies and general compositions of the Soviet and United States Navies. The Gorshkov series, to be understood, must be interpreted in the framework of the differences in philosophy and historical development of the world's two most powerful navies.

Differing Strategies. Soviet naval strategy is defensive and deterrent.[4] It is a strategy of sea denial rather than sea control. It is a strategy reactive to our Navy, designed to prevent us from accomplishing our mission. Their navy has traditionally been subordinated by landpower thinking Soviet generals.[5] This army-dominated thinking has traditionally assigned the Soviet Navy to an inferior, defensive role in direct or indirect support of the Soviet Army. Consistent with this thinking and with a defensive strategy, their major mission in war is to destroy or repulse our Navy should it attempt to approach the Soviet Union.[6] They have not included in their navy sea-control and projection capabilities such as aircraft carriers or any significant amphibious capabilities. Their capital ship, itself a sea-denial weapon, is the nuclear submarine, which they have constructed in quantity. Many of their ships and submarines are equipped with surface-to-surface missiles designed to destroy U.S. ships and deny them the use of the seas. In wartime the Soviets envision operating their ships within the range of land-based air cover, a condition that further commits them to a defensive posture. Nor do they have, even if air cover were available, either the overseas base structure or the at-sea distant-water support capabilities to permit sustained blue-water naval operations in wartime.

Soviet geographical constraints, of which Gorshkov reflects an acute awareness, have further oriented their navy to the strategic defensive. To protect their maritime frontiers, they have been forced—because of peculiarities of their geography—to fragment their navy into four fleets in peripheral seas. The Soviet Northern Fleet is stationed in the Barents Sea, while the other two European fleets are situated in the Baltic and Black Seas. They also maintain a permanent "squadron"[7] in the Mediterranean with the ships for this force drawn primarily from the Black Sea and Northern Fleets. Their fourth fleet—stationed over 5,000 miles away from their other fleets—is the Pacific Fleet located in the Sea of Japan. This geographic separation has forced each fleet

to be organized largely as an independent fleet since their geographic locations negate close mutual support.

Each separate fleet must also pass through interdictable straits to reach the open sea. The Northern Fleet must pass through the Greenland-Iceland-United Kingdom Gap, the Baltic Fleet through the Danish Straits, the Black Sea Fleet through the Turkish Straits, the Mediterranean "Squadron" through the Sicilian Straits and Gibraltar, and the Pacific Fleet through straits leading from the Sea of Japan. These fleets are distant from the major world maritime routes which they must interdict if they are to deny an enemy use of the sea. Finally, the extreme northerly orientation of their country ensures hostile climatic conditions for their Northern, Baltic, and Pacific Fleets, with attendant problems of severe weather, closed harbors, ice, et cetera for significant parts of the year. In sum, a consistent landpower mentality and physical handicaps of geography have further inclined the Soviets toward a defensive, sea-denial strategy as opposed to an offensive, sea-control strategy.

U.S. naval strategy, by contrast, is an offensive, sea-control strategy. It is a strategy which seeks to gain and maintain control of the seas, to ensure their use by friendly forces, and to deny their use to an enemy. Central to this strategy are aircraft carriers, which ensure the availability of organic fleet air cover in seizing control of the seas and protecting naval formations and amphibious operations. Not confined to operations under the narrow umbrella of land-based air, the U.S. Navy has global sea-control capabilities. Consistent with this strategy, it has developed efficient amphibious projection capabilities which provide the capability to project power across oceans and onto hostile shores. It also possesses well-developed at-sea support capabilities and forward bases to permit sustained distant-water operations and, in response to the huge Soviet submarine force, has developed considerable antisubmarine warfare capabilities—maintaining a sizable lead over the Soviets in this area.

Nor does U.S. naval power suffer from serious geographic handicaps. Granted, the U.S. Navy is divided into two fleets, but this fleet fragmentation problem is in no way as severe as the Soviets'. U.S. naval bases front on the open ocean, and the major world maritime routes are at our ocean doorstep. While a landpower mentality and geographical constraints on naval power seem almost to have predestined the Russians to a defensive sea-denial strategy, the U.S. maritime mentality and relative lack of geographical constraints on naval power seem almost to have predisposed an offensive, sea-control strategy.[8]

The "Big-Navy" Theme. Gorshkov maintains that great national power and a powerful navy are indispensable concomitants. To be a great power, a state must also be a maritime power; and when maritime power declines, great-power status diminishes also. "All of the modern great powers are maritime states."[9] Further:

> Naval might has been one of the factors which has enabled certain states to advance into the ranks of the great powers. Moreover, history shows that states which do not have naval forces at their disposal have not been able to hold the status of a great power for a long time.[10]

And again: It is evident . . . that every time ruling circles in Russia failed to properly emphasize development of the Fleet and its maintenance at a level necessitated by modern-day demands, the country either lost battles in wars or its peacetime policy failed to achieve designated objectives.[11] In the 16th century Spain neglected to maintain an adequate navy and, as a result, lost her overseas possessions "and was gradually

transformed from a great power into a third-rate state."[12] In the 17th century, Holland lost her great-power status and colonies because her navy was not sufficiently strong; she "became a second-rate colonial power."[13] Conversely, in the 18th century, England became the leading capitalist country through her naval power, and in the early 19th century Napoleonic Wars, "the course of the war at sea and the gaining of domination by the English Fleet had a great effect on the further policy of the belligerents."[14] Therefore, to be and remain a great power, a country must also be a great maritime power; and Russia "has been and remains a great seapower."[15]

Gorshkov—in support of the big-navy theme of the series—cites historical precedents and arguments to assert the existence of a longstanding navalist tradition for Russia.[16] He states that the more enlightened czars, Lenin, and even the Communist Party itself, since 1917, have followed a strong navy policy. The people too are seen as having a historic affinity for the sea. Peter the Great, in Gorshkov's second article, is thus shown as seeing the requirements to build both an army "and a powerful Navy with all urgency."[17] Presumably, if the need for a powerful navy was evident to Peter the Great, it should be clear to present-day Soviet officials. In article five he alludes to "Leninist theses," associating them with the growing importance "of our building an oceanic fleet,"[18] to show that Lenin too was a strong navalist. Invoking the authority and prestige of Lenin on the side of naval expansionism, no matter how speciously done, establishes a powerful precedent. In this same article he further associates the party with these same Leninist theses "which comprise the basis of the military policy of the Party."[19] This last touch seems to place any opponents of continued expansion in opposition to the party. Throughout Russian history, "the qualities of a sea-going people" have been "inherent in Russians since ancient times."[20] It has been a "slanderous assertion that the Russians are not a sea-going nation but rather a dry-land nation, that the sea is alien to them, and that they are not gifted at seafaring."[21]

Running through the Gorshkov series is the proposition that the naval expansion program should occur as rapidly as the Soviet economy and shipbuilding capacity will permit. He states this idea in the first article, saying that: "Every social-economic system has built up armed forces, including navies, commensurate with its economic and technical capabilities."[22] Also in the first article, he cites the British example, which he would obviously like the Soviet Union to follow: "Supported by a powerful economy which provided England the supremacy of the strongest fleet in the world . . ., it took over the leading position among the capitalist countries and held it for almost two centuries."[23] To support his ideas with naval activity during the Lenin and Stalin eras, Gorshkov must largely engage in generalities while lauding whatever navy achievements he can. However, he can state that in 1938 the U.S.S.R. attained the world's largest submarine force, indicating that this was but part of an approved larger construction program—interrupted by the war—for a "large sea and oceanic fleet" in which "major surface ships were . . . to be its nucleus."[24] Pursuing this claimed precedent on into the present, Gorshkov states in his last article: "The need to build a powerful ocean-going Navy . . . was backed up and is being backed up by the vast capabilities of the military economic potential of the Soviet state and by the achievements of our science and technology."[25]

Gorshkov then seems to conclude this proposition with the forthright assertion that the Soviet economy can well support such a large and sustained naval construction program:

> In speaking of the military-economic potential of our country, it should be noted that it possesses vast, practically inexhaustible energy, raw material, and fuel resources. This high, stable rate of growth of the economic power of the USSR, observed throughout its entire history, confirms the stability, planned nature, and harmoniousness of the Soviet state.[26]

Gorshkov, in this proposition for an all-out naval expansion program, seems to be advocating more than announcing. If he is in fact announcing here too, then surely he must realize—as must the Soviet leadership—that the United States is likely to respond with an expanded naval construction program of its own. Therefore, it seems likely that, while continued and diversified Soviet naval expansion may be forthcoming, it will not be so dramatic as Gorshkov would like.

Gorshkov also sees the solution to Russia's traditional fleet fragmentation problem as residing in a larger, more powerful navy. In the third article he recounts historic Russian problems of inadequate or nonexistent naval strength in the Baltic, the Black Sea, and the Far East. Speaking of czarist times, for which the obvious modern-day analogy exists: "The considerable difficulties for Russian seapower stemmed from its geographical position, which required having an independent fleet capable of ensuring the performance of the missions confronting it in each of the far-flung naval theaters."[27] He goes into particular detail with Russia's great naval disaster at Tsushima in 1905. In this recounting he is implicitly arguing for stronger fleets to handle any potential enemies in these areas, since time-distance and other factors prevent one fleet from effectively reinforcing another in wartime.

He criticizes czarist governments because they constructed a fleet "basically from considerations of prestige, and not the true interests of the state."[28] They did not, Gorshkov asserts, take into account operational conditions and ignored "requirements, unique to Russia, stemming from her geographical location."[29] For "Russia needed a separate fleet on each sea, which was usually weaker than the fleets of potential opponents in the given theater."[30] Further, "One of the most important characteristics of utilization of the Russian Fleet was the need for inter-theater maneuvers, governed by the absence of the necessary quantity of naval forces in individual theaters."[31] Thus, Gorshkov's resolution of his navy's fleet fragmentation problem is classically simple: provide each of the four fleets with sufficient naval power to independently handle any potential opponents!

As further big-navy justification, Gorshkov depicts a powerful navy as a force to assist in the historic Russian drive for open ocean access through the interdictable straits. Gorshkov's solution to this problem is a wartime breakout strategy. He portrays czarist naval history as consisting of a sustained struggle to gain free access through seizure of the straits. Having lost her window on the Baltic and her Black Sea outlet prior to Peter the Great, "Russia was not resigned to being cut off from the seas and continually waged a struggle for outlets to them."[32] As he devotes attention to czarist efforts to obtain the use of the Turkish Straits, it becomes apparent that Gorshkov intends a modern analogy and that he does not rule out the possibility of seizing them in a limited war scenario. In articles two and three, he seems to argue for a strengthened Soviet Mediterranean Squadron that could control the Eastern Mediterranean against 6th Fleet and NATO naval forces while the Soviet Army seized the Straits. In article three, he says: " . . . historically it has turned out that when a threat arises of an

enemy encroachment on the territory of Russia from the southwest, the Russian Fleet has been moved into the Mediterranean Sea where it has successfully executed great strategic missions in defending the country's borders from aggression."[33]

While Gorshkov presents a scenario only for the Turkish Straits, it is easy to project a similar breakout strategy for the Greenland-Iceland-United Kingdom Gap or the Danish Straits as well. It also seems clear in article four of the series that Gorshkov views the lack of open ocean access for his fleets vis-a-vis NATO and the United States to be analogous to the strategic German dilemma with her fleet, bottled up in the Baltic, vis-a-vis the British in World Wars I and II. Breakout is Gorshkov's recommended solution, which will require in part a big navy both to effect and to make the effort worthwhile.

Gorshkov describes unique peacetime uses of a navy to support the global interests of a powerful state as a further rationale for a large navy. He couches this rationale in both general and specific terms. As a general proposition, it is a "special feature" of a Navy that it "can be used in peacetime for purposes of demonstrating the economic and military might of states beyond their borders."[34] And "over a period of many centuries it has been the solitary form of armed forces capable of protecting the interests of a country overseas."[35] It will therefore be "useful to examine questions related to this specific feature of naval forces as a . . . part of the military organization of a state."[36] It is, Gorshkov asserts, quoting Engels, "the political force at sea" which has "a most important significance as a political weapon of the great powers."[37] He notes that "the fleets of the Western states have represented not only a part of the armed forces, which were employed in war in the naval theaters, but also a weapon of state policy in peacetime."[38] Western nations with numerical and firepower superiority have in the past "striven to employ . . . naval forces as an important political instrument to create definite prestige in the international arena and in mutual relations with other states."[39] While this is his general thesis, he also cites two specific roles for navy use in peacetime as being gunboat diplomacy (although he does not call it this by name) and as being a negotiating lever.

In gunboat diplomacy applications, "Maritime states with great economic capabilities have," says Gorshkov, "widely used their naval forces in peacetime to put pressure on their enemies, as a type of military demonstration, as threats of interrupting sea communications, and as a hindrance to ocean commerce."[40] He notes in his 10th article that the sudden appearance of naval forces in an area has sometimes "permitted the achievement of political goals without resorting to military operations by only threatening to initiate them."[41] He then goes on to define further his conception of gunboat diplomacy:

> Consequently the role of a Navy is not limited to the execution of important missions in armed combat. While representing a formidable force in war, it has always been a political weapon of the imperialist states and an important support for diplomacy in peacetime owing to its inherent qualities which permit it to a greater degree than other branches of the armed forces to exert pressure on potential enemies without the direct employment of weaponry.[42]

While most of his examples of gunboat diplomacy are drawn from alleged actions and policies of Western navies, he leaves no doubt that he thinks that it should be a policy of the Soviet Navy as well. In the second article, Gorshkov provides historical examples of success-

ful Russian gunboat diplomacy. In one example, in 1769 a Baltic Fleet squadron was sent to the Mediterranean "to support the making of important political moves by Russia by threatening Turkey from the sea. . . ."[43] In his final article, Gorshkov leaves no doubt in his belief in the efficacy and desirability of using gunboat diplomacy in select situations, when he asserts:

> . . . it is the Navy which is this kind of force, capable in peacetime of visibly demonstrating to the peoples of friendly and hostile countries not only the power of military equipment and the perfection of the naval ships, embodying the technical and economic might of the state, but its readiness to use this force in defense of state interests of our nation or for the security of the Socialist countries.[44]

Having a large navy, Gorshkov indicates, permits a state to negotiate from a position of strength and protects it from unnecessary concessions to other strong maritime powers. In article three he illustrates this concept from Russia's unfortunate experiences of the Crimean War:

> The significance of the Navy in this war was also determined by the extent to which its presence in a given theater could be used by the diplomats of the belligerent sides to support their positions at the peace talks. Russia, almost totally deprived of her fleet in the Black Sea, was unable to oppose the fleets of the enemy states with her own naval power, and therefore had to accede to the provisions of the Paris peace treaty. Great Britain and France, having consolidated their position at sea, acquired new possibilities for exerting pressure on Russia with the threat of attacks against her from the southwest, consolidating their control over the Turkish Straits zone, and increased their influence in the Near and Middle East.[45]

Earlier, in his first article, Gorshkov also indicated that a strong navy was valuable in any type of negotiations:

> Many examples from history attest to the fact that . . . all problems of foreign policy were always solved on the basis of taking into account the military might of the "negotiating" sides, and that the potential might of one state or another, built up in accordance with its economic capabilities and political orientation, permitted it to conduct a policy advantageous to itself to the detriment of other states not possessing a corresponding military power.[46]

While unspoken, the importance of negotiating from a position of strength with a large and powerful navy in any arms limitations talks is obvious, as Gorshkov undoubtedly intended it to be.

The Navy, the Army, and the Budget. Gorshkov clearly reflects that he is under budget constraints. He is either competing with the army for an increase in present resources or is attempting to forestall arguments for diminishing the navy budget or both. Although he and the navy are subordinate to Marshal Grechko (and other marshals in the Ministry of Defense), he nevertheless competes fiercely for resources and is often, directly or indirectly, sharply critical of the army and of their landpower mentality in the process. He constantly stresses the navy's unique capabilities and favorably compares it with the army at every opportunity. Thus, in the first article:

> The hallmark of naval forces is their high degree of maneuverability, and ability to concentrate secretly and to form powerful groupings which are of surprise to the enemy. At the same time

> naval forces are more stable against the effects of nuclear weaponry than land forces. All of this has catapulted the navies into the front ranks of the diverse modern means of armed combat.[47]

He also implies that the navy either now is, or should be, ascendant in the budget: "In some stages of the history of states ground forces have played the main role, and in others, the Navy."[48] In discussing the Seven Years' War (1756-1763), he states that events then required restoration of the fleet and "an increase in its role within the system of armed forces."[49] A contemporary analogy seems intended here—that the navy now merits a larger budget share. He further states, polemically:

> The opponents of Russian seapower have widely used (and are widely using) falsification of its military history. In particular they assert that all of Russia's victories have been gained only by the Army and that it can be powerful only by strengthening the Army at the expense of the Navy.[50]

He frequently cites the uneven historical development of the Russian Navy. He is obviously attempting to avert a recurrence. Historically, he says: "... the ... Fleet developed rather unevenly. Surges in the naval might of Russia gave way to declines. And each time a reduction in its seapower evoked new difficulties on the historical path of the state and led to serious consequences.[51]

While he blames czarist officials, landpower enthusiasts, and Western imperialists and their propaganda for many of the Russian Navy's historic travails, it is apparent that he holds equally guilty the living and that he seeks, or seeks to retain, present resources. The answer may be, in accord with the announcement postulation, that he is rebutting critics who desire to cut back on his approved program. This supposition then explains his pointed quotation of Lenin in the fifth article: "Like a red thread the idea runs through all of Lenin's directives, letters, and orders concerning the need for firmness and purposefulness in carrying out intended plans, and of the falseness of any kind of wavering and indecisiveness at the crucial moments of the struggle."[52]

Gorshkov forthrightly defends Soviet Navy deployments to the Mediterranean. Presumably, the permanent presence of the Soviet Mediterranean Squadron and its attendant high costs have been under attack. He justifies its cost-effectiveness in terms of the defense[53] it provides the Soviet Union against attack by 6th Fleet aircraft carriers and missile-equipped submarines:

> Today, when the capabilities of the imperialist aggressors to attack the Soviet Union directly from the Mediterranean Sea have increased extraordinarily, this region has assumed especially important significance in the defense of our Homeland. The constant presence there of the U.S. Sixth Fleet with aircraft carriers and missile-carrying submarines has as its basic mission a surprise attack against the Soviet Union and the countries of the Socialist community. The U.S. Navy command openly states that the missiles of the nuclear-powered submarines and the carrier aircraft from the Mediterranean Sea are aimed at objectives in the USSR and the states of Eastern Europe and are in a constant state of readiness to deliver nuclear strikes against them.
>
> It is natural that in response to the direct threat the Soviet Union is forced to undertake defensive measures and implement its indisputable and legal right to have warships in the Mediterranean Sea. They are there not to

> threaten peace-loving peoples, and not to implement any sort of expansionist desires, which are alien to the very nature of our Socialist state, but in order to nip aggression in the very bud, if the imperialists attempt to undertake it from this region.[54]

Gorshkov's arguments for the necessity for the operations of the Mediterranean Squadron are among the most direct and vigorous in his series. By implication he also defends distant-water deployments and their costs in general to the Indian Ocean, the Hump of Africa area near Guinea, and the Caribbean. Gorshkov obviously believes that his navy should operate beyond home waters and that the associated costs are well worth it. He seems in effect to be announcing that Soviet naval deployments out of home waters will continue.

Weapons, Weapon Systems, and Projection. On weapons and weapon systems, Gorshkov at the very outset of his series remarked on the difficulty of making meaningful modern-day comparisons of warships and navies:

> The qualitative transformations which have taken place in naval forces have also changed the approach to evaluating the relative might of navies and their combat groupings: we have had to cease comparing the number of warships of one type or another and their total displacement (or the number of guns in a salvo or the weight of this salvo), and turn to a more complex, but also more correct appraisal of the striking and defensive power of ships, based on a mathematical analysis of their capabilities and qualitative characteristics.[55]

This problem is particularly acute in the case of the Soviet and American Navies because the navies are differently configured in response to different strategies and missions in war and peace. He is also aware this difficulty has important ramifications in assessing relative levels of Soviet and United States naval strength[56] and in naval arms limitation talks. In part, Gorshkov makes use of this difficulty as another reason for approaching any naval arms limitation talks (which he clearly opposes) between the Soviet Union and the United States with caution. In Gorshkov's opinion, the Soviet Union should engage in such talks when it has a big and powerful navy in being, well in excess of current capabilities.

While he has in the past been identified with antidétente[57] (he is a hard-liner), Gorshkov bases his present opposition on the alleged ineffectiveness of such talks in curbing naval arms races, on the fact that they only affect navies and not armies and air forces as well, and on the supposed advantages they confer on imperialist powers. He is obviously concerned with the effects that any naval arms limitations talks might have on the size of his navy, as well as on the large construction program which may have been approved and which he may, in part, be announcing in his series. Again, he presents his arguments circuitously, using historical examples which have modern analogies:

> Recognizing the essential role of navies in war and in peace, the imperialist powers repeatedly attempted in the period after the First World War to regulate the growth of naval arms in special conferences (it is interesting that other forms of armed forces were not subjected to this). However, as is well known, all of these attempts did not lead to a reduction of the navies of the powers, and from the mid-1930's a new unrestrained and in no way regulated naval arms race began.[58]

In the early articles of his series, Gorshkov made the point that negotiations

should proceed from strength, that one should, by implication, consider engaging in naval arms talks only if one already has a large and powerful navy to provide a negotiating edge. But such talks are, in Gorshkov's view, only the "war of the diplomats for supremacy at sea."[59]

While he maintains that such talks do not contain naval arms races anyway, he also pointedly notes that armies seem exempt from similar talks. The conferences of the 1922-1935 period:

> . . . fulfilled only a delaying function in the naval construction of the largest states and then only up to the mid-1930's (thereafter the naval arms race proceeded without any sort of limitations). It is interesting that no such attempts were undertaken until our day with respect to the other branches of the armed forces. Even today, when the arms limitation talks have become a reality and ways of solving this problem have been defined, arms control is still only being extended to strategic missiles, including those belonging to the navies.[60]

Imperialist powers invariably initiate naval arms talks to seek allies or to delimit the naval power of a competitor, Gorshkov alleges. He claims that the London naval arms limitation talks only showed that "the imperialist powers were aligning themselves not for . . . limiting naval armaments, but to wage the forthcoming war and to seek allies. . . ."[61] Further:

> The failure of the 1936 London Conference . . . served as a signal for an unlimited arms race by the imperialist powers. Just the very fact of repeated attempts to regulate naval armaments by international agreements, especially after the First World War, attests to the important significance the major imperialist powers attached to naval forces.[62]

Gorshkov provides no meaningful clues concerning what the Soviet Union will or will not do about constructing aircraft carriers. He simply does not discuss it, and we are left only to speculate. It is, in any event, the major area in which the Soviet Navy remains clearly inferior to the U.S. Navy. Regardless of what the Soviets may do, it is not a shortcoming that they can readily correct. Even under a parity principle achieved through naval arms talks, the costs of constructing a fleet of carriers would be enormous. Our lead in operating carriers is great, both in technology and in experience. Soviet carriers would suffer from the geographic handicap of no direct access to the open ocean. They also lack overseas bases for forward support and distant-water, at-sea replenishment capabilities. Gorshkov does not discuss these matters but neither does he withdraw his previous criticisms of carrier usefulness in nuclear war. Likewise, Gorshkov fails to mention the new *Kiev* class of small carriers which intelligence has now confirmed the Soviets are constructing in the Black Sea.[63] In his final article he defends the unique construction paths his navy has taken, saying that these have met their needs "to the maximum degree" without copying Western construction, presumably including carriers:

> The utilization of the achievements of science and industry together with the introduction of scientific methods in determining the more valuable mix of weapons and equipment characteristics, taking into account economic factors, has made it possible for naval development to approximate the Navy's vital needs to the maximum degree, without copying naval construction in the Western countries and following our own national path which best corresponds to the specific tasks facing the Navy and the conditions for carrying them out.[64]

The nuclear-powered missile submarine remains, in the Gorshkov perspective, the capital ship of the Soviet Navy. This is the result of the confluence of developments in nuclear weapons, ballistic and cruise missiles, nuclear propulsion, and electronics.[65] Nuclear weaponry has been "the decisive factor"[66] that has permitted the navy's submarine forces to become a part of the country's strategic nuclear forces. These strategic forces employ ballistic missiles for use against "strategic targets of the enemy deep in his territory from different directions," while tactical nuclear submarines employ cruise missiles for "the delivery of powerful and accurate attacks from great distances against the enemy's major surface ships."[67]

Nuclear power plants have transformed submarines into "genuine undersea warships, incorporating . . . such basic earmarks of sea power as maneuverability, hitting power, and concealment."[68] Equipping "submarines with nuclear power plants has made possible a sharp increase in the speed and range of their underwater navigation. And this is understandable, since the power-to-weight ratio of submarines with a nuclear-power plant considerably surpasses that of diesel submarines."[69] Electronics decisively permits "depicting the situation"[70]—presumably through radar and other displays of tactical information from assisting air platforms. Thus, "a course has been charted in our country," Gorshkov states, "toward the construction of an oceangoing Navy whose base consists of nuclear-powered submarines of various types."[71]

The Gorshkov articles may imply a withholding strategy[72] for Soviet ballistic missile submarines in a nuclear exchange, while other wartime missions may be interdiction of Western sea lines of communications and antisubmarine warfare. He stresses the desirability of employing surface and submarine forces in concert, which also constitutes an argument for a large, balanced navy. If the withholding strategy is correctly inferred from the Gorshkov series, it probably derives from the greater survivability of ballistic missile submarines, compared to land-launch facilities. Even after a general nuclear exchange that would leave Soviet land-launch capabilities destroyed, submarine-launch capabilities would remain to ensure destruction of any strategic targets left in the United States.

A wartime mission of interdicting Western sea routes emerges from Gorshkov's discussion of German submarine operations in both World Wars and from the known capabilities of his huge submarine force. Specifically, he says that "it is clear that submarines in World War II were, and even more so under modern conditions are, the main means of combatting the enemy's shipping."[73] Concerning antisubmarine warfare, he notes that in World War II submarines "operated successfully against enemy submarines."[74] In his final article, he states that "Submarines are also becoming valuable anti-submarine combatants capable of detecting and destroying the enemy's missile-carrying submarines."[75]

That Gorshkov is sharply critical of the Germans for not using surface and aviation forces to support their submarines implies that he would not make the same mistake. Despite the successes of Hitler's armies in Europe, England remained unconquered and the attempted submarine blockade on Britain failed. Gorshkov feels this was because: " . . . despite the exceptional threat to submarines on the part of anti-submarine forces, the German naval command did not conduct a single operation or other specially organized combined action aimed at the destruction of these forces."[76] While German submarines inflicted great losses, they failed.

> One of the important reasons for this was that the submarines did not have the support of other forces and above all of aviation,

> which could have carried out reconnaissance for the submarines and destroyed anti-submarine forces, as well as operated against the enemy's economy by hitting his ports and targets in the shipbuilding industry, not to mention his ships at sea. These reasons considerably reduced the effectiveness of German submarine employment in cutting off the enemy's shipping in the Atlantic.[77]

In sum, says Gorshkov: "... a modern fleet, designed to conduct combat operations against a strong enemy, cannot be simply a submarine fleet. The underestimation of the need to support submarine operations with aviation and surface ships cost the German command dearly in the last two world wars."[78]

Gorshkov has relatively little to say about other areas of naval power in which the United States enjoys a substantial lead and advantage—antisubmarine warfare (ASW), amphibious projection and intervention, at-sea and distant-water replenishment, and forward bases. As with carriers, the Soviet Union cannot overtake the U.S. lead in any of these areas without large costs and without years of concentrated effort. Gorshkov denigrates, for example, the efficacy or potential of ASW as a realistic counter of Polaris. He seems to accept that a large and expensive effort to attempt to counter Polaris through at-sea detection and prosecution is both unrealistic and cost-ineffective. The reality of the relative invulnerability of Polaris has become more manifest with the expanded missile ranges of U.S. missile submarines which provide even greater expanses of ocean in which to roam and hide. As noted above, he recognizes the value of another submarine as an ASW platform, but no large or costly effort to expand the ASW capabilities of submarine platforms seems evident.

No increases in amphibious forces to a level of strategic significance seem apparent. Accordingly, Soviet naval infantry (marines) will probably remain peripherally tasked in areas such as the Baltic, Black Sea, and the Scandinavian Peninsula. This suggests that no strategic intervention capability such as the United States possesses seems forthcoming, except for the possibilities of naval gunboat diplomacy. Again, costs appear to be a major factor. The allocation of resources in designing and constructing the wide range of amphibious ships and craft required, in expanding and training the Soviet marines, and in providing means to protect and support them at sea and in the amphibious objective area would be enormous. Such costs appear prohibitive in view of other, competing, and more urgent Soviet naval requirements.

While the papers reveal no apparent major program to improve at-sea and distant-water replenishment capabilities, some progress can be expected over a period of years, and their new *Chilikin* class oiler is a step in this direction. They also do not possess multi-commodity ships which permit replenishing of an entire formation, task group, or force with fuel, food, ordnance, and supplies in one operation, using alongside and helicopter replenishment techniques. Soviet underway replenishment problems in distant waters are compounded by vast distance from home bases. Placing nuclear power in surface ships would partially solve the problem the Soviets would have in supporting distant operations in wartime, but there is no indication that this is planned for surface ships, and Gorshkov states that only submarines will be so powered.

In his final article, Gorshkov stresses "balanced forces" and new requirements for forces and for the means to support them. He speaks of long oceanic cruises and the long stay of ships in the ocean. He notes the importance of improved habitability standards which

permit sustaining a high combat capability [79] for extended at-sea periods. Extended employments to the Mediterranean—and presumably elsewhere—thus appear likely to continue. Gorshkov seems well aware of his at-sea and distant-water support problems, their magnitude, and the need to overcome them. Despite these problems and the large costs involved, a major effort will probably continue to keep substantial Soviet naval units in distant deployments.

Finally, Gorshkov is acutely aware that he does not have a system of forward bases for his navy. In his third article, he complains that: "Many islands discovered by Russian seafarers in the Pacific were not added to Russian possessions, although as their first discoverer she was fully entitled to this right."[80] The tone in his articles concerning forward bases is pessimistic: the inference is that he either does not expect to get them or at this point in time he cannot count on them. He obviously recognizes this as a critical deficiency which the United States does not have—what with the base facilities available to the United States in NATO countries, the Mediterranean, the Caribbean, at Pearl Harbor, in Japan, in Taiwan, at Subic Bay, in Australia, et cetera. Absence of forward bases and lack of an at-sea replenishment capability are problems which mutually compound each other. In summary, it is in these additional areas of naval power in which the United States has a decided advantage—ASW, amphibious projection and intervention, at-sea and distant-water replenishment, and forward bases—that the Soviet Navy will likely remain in arrears, perhaps substantially, for at least a number of years.

Components of Soviet Seapower. Gorshkov, in his final article, makes a bow, elegant but brief, to the other "necessary components" of the Soviet Union's "constantly strengthening . . . seapower."[81] These three components are oceanographic research, the merchant marine, and the fishing fleet. He further indicates that the Soviets' sea and ocean industry will be increased to exploit ocean resources. His navy directly controls some of the oceanographic research effort and exerts influence on the course of many of its other activities. The Soviet oceanographic effort, much of it in response to navy requirements, will also expand: "We are presently conducting a large volume of research on the hydrosphere. Yet the World Ocean still remains the least studied section of the globe, and the scale of work on trying to understand it must and will be expanded in the future."[82]

Gorshkov describes the value and the comprehensiveness of the Soviet oceanographic effort:

> In order to exploit the World Ocean and to utilize its resources, it is essential to have detailed and comprehensive knowledge of the hydrosphere of the Earth, to understand the processes occurring in it, and its effect on the land and the atmosphere, and on the formation of weather. Knowledge ensuring navigational safety in the oceans and seas and flights over them is also needed. Moreover, reliable information on the various resources existing in the hydrosphere and on possible methods of exploiting them is necessary. Special expeditionary research oceanographic ships, scientific organizations, equipment, and, of course, the appropriate personnel are required to understand the seas and oceans. All of this is one component of the seapower of a country.[83]

The Soviet merchant marine is also growing. The shipbuilding and ship repair industry he mentions are of course important to his navy. One reason for having a large navy is, ostensibly, to be

able to protect the interests of the merchant marine, as well as those of the distant-water fishing fleet and the oceanographic research effort. Nevertheless, he disposes of the Soviet merchant marine in two paragraphs:

> An important integral part of seapower is the equipment and personnel which make possible the practical utilization of the oceans and seas as transport routes connecting continents, countries, and peoples. For this, it is essential to have a merchant marine, a network of ports and services supporting its operation, and a developed shipbuilding and ship repair industry.
>
> In 1972 the Soviet Merchant Marine, which is growing at a rapid rate, was sixth among the merchant fleets of the world. A majority of its ships have been built in recent years and are among the more technically advanced ships.[84]

While what Gorshkov says here is true, the Soviet merchant marine has not yet commercially adopted, to any substantial degree, such advanced methods of sea cargo transportation as containerization, LASH (lighter aboard ship) type ships, and roll-on, roll-off ships. Yet the Soviet merchant marine is huge, is growing rapidly, and is a significant component of Soviet seapower.

As a final component of seapower Gorshkov discusses the Soviet fishing fleet which appears regularly off the New England and Newfoundland coasts with large modern ships: "The next component of seapower is the ships, technical equipment, and the personnel needed for the practical exploitation and utilization of the resources of the World Ocean, that is, the fishing fleet. Today our country has the strongest fishing fleet in the world at its disposal."[85] Elsewhere in his final article, he speaks in glowing terms, as a true seapower enthusiast, of the ocean's vast resources of food which the Soviet fishing fleet, as a part of the world fishing fleet, is exploiting:

> The reserves of animal protein, i.e., fish, sea animals, plankton, etc., in the World Ocean (if measures are taken to restock them) make it possible to consider it to be one of the most important sources for solving the food problem for the growing population of the world. Today the catching of fish and other "gifts of the sea" is carried out only in a small section of the ocean surface, consisting of about 10% of it. The annual world catch of fish equals some 60 million tons, but in the near future it may reach 100 million tons or more.[86]

In his discussion of the fishing fleet, he indicates that the Soviets' "sea and ocean industry" will expand:

> The sea and ocean industry will also be developed in the future, will exploit new areas, and will expand the assortment of products of the sea being captured. The broadest prospects are opening up in the creation of equipment for extracting mineral resources from the water, from the sea bottom, and from beneath it.[87]

In his final article, Gorshkov includes an eloquent discussion on the resources of the ocean waters, the deep seabed, and the Continental Shelf. He refers to the tides, currents, temperature gradients of the water, et cetera as "truly inexhaustible energy resources" and notes that seawater contains all the elements, that manganese nodules rich in metallic content cover considerable parts of the deep seabed, and that vast reserves of oil and gas lie within the ocean floor.[88] He speaks, somewhat inaccurately, of the truly inexhaustible wealth of the World Ocean which, presumably, the expanding sea and ocean industry will exploit: "The reserves of

metals, minerals, fuels (oil, gas, and coal), various chemical raw materials, nuclear material, power and food reserves, locked in the seabed, are so vast that there is no comparison whatsoever with the known reserves existing on land."[89]

This "industry" probably refers to ocean mining and offshore drilling ventures. Magnesium, salt, and other minerals and substances may be extracted from seawater; manganese nodules may be scooped up from the deep ocean seabed in the Pacific for their manganese, cobalt, copper, and nickel content; and oil and gas wells may be drilled in offshore locations on the Continental Shelf. U.S. firms are now exploiting the oceans, their seabeds, and the Continental Shelf for such minerals and fossil fuels. That the Soviets will follow suit in such endeavors to exploit ocean wealth is hardly surprising.

While Gorshkov argues for the continued growth of Soviet seapower on virtually all fronts—navy, oceanographic research, merchant marine, resource exploitation—it is quite clear that in his mind the navy is the preeminent component. "However, we must consider the most important component of the seapower of the state to be the Navy, whose mission is to protect state interests of the seas and oceans and to defend the country from possible attacks from the direction of the seas and oceans."[90] A few paragraphs later, he says yet again that the Soviet Navy is expanding into a new, oceangoing navy: "The Communist Party and the Soviet government fully appreciated both the threat to our country which is arising from the oceans, and the need to deter the aggressive aspirations of the enemy through the construction of a new, ocean-going Navy. And this need is being answered."[91]

In his closing work, Gorshkov expresses considerable concern over those law of the sea matters which have significant impact on Soviet naval power. His positions on these are in many cases identical with those of the U.S. Government. Littoral states, he notes, have increasingly begun to divide up the World Ocean because of the possibilities for exploitation of its resources. His implicit concern is that such actions will curtail naval power through restricting the areas in which a navy operates. He criticizes, in particular, the highly alarming symptom of some states to expand the limits of their territorial seas out to 200 miles, a practice he views as extreme and nothing other than an attempt to seize great expanses of the ocean.[92]

Expansions of the territorial seas are having a definite and deleterious effect on the status of the high seas and freedom of navigation. Yet experience has shown the viability of the 12-mile limit which the Soviets claim as their territorial waters for the breadth of the territorial sea. While he avoids the Soviet positions on the Arctic seas peripheral to Russia and on the Sea of Okhotsk (over which, in both cases, the Soviets exercise considerable control), he is concerned that other areas, such as the Mediterranean, may be divided up among littoral nations through expansion of the territorial seas. Such action could virtually prohibit the operations of the Soviet Mediterranean Squadron, although Gorshkov does not openly express this fear.[93]

He is concerned with the problem of the innocent passage of combatants and auxiliaries and of aircraft overflights through international straits. Obviously, should some or all of the more than 110 straits being used for international shipping turn out to be closed territorial seas of littoral states, then this too will restrict Soviet naval power. He criticizes, as have Western writers, the vagueness of the 1958 Geneva Convention on the Continental Shelf in defining the limits of the shelf over which littoral states have jurisdiction. The vagueness of the definition has helped precipitate

controversies over division of the seabed adjacent to the coasts of littoral states. He also urges the complete demilitarization of the seabed, ostensibly in conjunction with ending the arms race.[94] Adoption of this standard Soviet line would of course outlaw any devices on the seabed for submarine detection, which—in view of the huge Soviet submarine force and the alleged existence of such devices in Western hands—would redound to Soviet naval advantage.

Gorshkov seems preoccupied with the potential effects on Soviet naval power of any dividing up of the seabed. In the vigor of his condemnation of this danger to expanding Soviet seapower, he not only defends international maritime law, but even criticizes developing countries in Africa, Asia, and Latin America for opting for such practices:

> Today the serious threat of a further division of the World Ocean exists. Therefore, it is not by chance that many countries and a great number of international organizations, beginning with the UN and ending with dozens of different types of intragovernmental and nongovernmental organizations and organs, are engaged with questions of the legal regime and with the development of new norms regulating the use of the World Ocean. The most characteristic feature in their work in the current stage is the fact that several Afro-Asian and Latin American developing countries are insisting on a review of all existing norms regulating the use of the World Ocean, based on the fact that they are not participating in the exploitation. In particular, they assert that current international maritime law is outmoded and does not reflect changes which have occurred in the world since 1958. Representatives of these countries put their position on the plane of a struggle between the poor and the rich, the backward and the industrially developed countries. . . .[95]

Gorshkov is painfully aware of the potentially profound effects that law of the sea matters may have on the naval power resident in world navies. Freedom to use the seas is essential for the application of naval power. The degree that that freedom is diminished through dividing up of the World Ocean among littoral states—through the extension seaward of territorial seas, through the nationalizing of previously international straits, through closed sea regimes imposed by countries littoral—is the degree that naval powers will lose their ability to effectively employ their forces.

Conclusions. The major and overriding conclusion to this commentary is that the Gorshkov articles are essentially announcement, particularly in their broad outlines. Accepting this proposition, Gorshkov has told us a great deal, and it appears possible that the content of his articles allows one to make some reasoned judgments on the course of Soviet seapower in general and of Soviet naval power in particular.

The most positive element in the Gorshkov announcements is that Soviet seapower—of which the navy is the key component—will, in general, continue to expand on virtually every front. Gorshkov clearly said that the Soviet merchant marine, the Soviet oceanographic effort, and the Soviet ocean exploitation effort will all expand. He did not elaborate on the fishing fleet, merely noting that it was already the world's strongest fleet. Soviet seapower will therefore present an increasingly larger challenge in the aggregate to traditional Western seapower superiority.

The Soviet Navy seems destined in particular to grow into a larger, more modern, more balanced navy. While submarines will remain at least for several years as the Soviet Navy's capital ship, their navy is likely to see increased

numbers and variety of modern, but conventionally powered, surface ships. The future role of aircraft carriers in the Soviet Navy remains unclear and will probably remain so at least until the new *Kiev* class carriers now being built in Russia begin operations. (This writer believes that the Soviets have not yet made a commitment to build a fleet of carriers but wish to analyze the *Kiev's* performance before making the costly, long-term, and strategic decision to proceed with additional construction.) Soviet at-sea and distant-water replenishment and support capabilities seem likely to improve, perhaps substantially, in coming years; but no major increase in Soviet amphibious projection capabilities or in antisubmarine warfare seems forthcoming. The Soviets continue to need, and lack, a system of forward bases to support deployments beyond home waters; this deficiency will probably continue for some time.

The Soviet Navy will thus continue to lag behind its U.S. competitor in several key areas, but particularly in the at-sea air cover in the open ocean which at present only fleet carriers can provide. At the same time, the huge Soviet submarine force will continue to pose both a strategic nuclear threat against the continental United States and a strategic interdiction threat against its sea lines of communication. The Soviets will continue to work under the strategic hardships of unfavorable geography which both fragments and encloses their naval power. From the vantage point of this writer, the Gorshkov papers confirm that Soviet Naval Strategy will generally remain defensive and deterrent for the next several years and perhaps for a decade or more.

BIOGRAPHIC SUMMARY

Comdr. Clyde Smith, U.S. Navy, holds undergraduate degrees from both Oklahoma State University and the University of Maryland, a master's degree from Oklahoma State University, and is a graduate of the Russian Language School. As an intelligence officer he has served in West Berlin, on the staffs of Commander 7th Fleet and Commander Cruiser-Destroyer Group 8, and has had three separate tours in Vietnam—Naval Intelligence Adviser in the Naval Advisory Group (1964-65), Staff Intelligence Officer to Commander River Assault Flotilla 1 (1966-67), and Chief of Operational Intelligence to Commander Naval Forces Vietnam (1970-71). Commander Smith is currently a student in the College of Naval Warfare.

NOTES

1. Each of the 11 articles of the Gorshkov series will be published, on a one-per-month basis, in the January through November issues of the 1974 *United States Naval Institute Proceedings.*

2. For biographical information on Admiral Gorshkov, see Edward L. Crowley, et al., eds., *Prominent Personalities in the USSR* (Metuchen, N.J.: Scarecrow Press, 1968), p. 194.

3. *Morskoy Sbornik* (Hereinafter *MS*), No. 2, 1972, pp. 20, 23.

4. For a more comprehensive discussion of these aspects of Soviet naval strategy, see Robert W. Herrick, *Soviet Naval Strategy* (Annapolis: United States Naval Institute, 1968), pp. 143-57.

5. For example, in Marshal V.D. Sokolovsky, ed., *Military Strategy* (Moscow: Soviet Ministry of Defense, 1968), all of the authors and reviewers of the official Soviet view of military strategy were army marshals, generals, or colonels.

6. In such efforts the Soviets have stressed anticarrier operations. See John T. Funkhouser, "Soviet Carrier Strategy," *United States Naval Institute Proceedings,* December 1973, pp. 27-37, for a good discussion of this aspect of Soviet naval strategy.

7. While it is common in U.S. Navy circles to refer to this Soviet Mediterranean force as a "fleet, the Soviets themselves call it a "squadron" (*eskadra*).

8. For further discussion of the influences of geography on Soviet and United States naval strategies and on fleet composition, see the exchange of letters between Senator Proxmire and Admiral Zumwalt, in May and June 1972, as appearing in the U.S. *Congressional Record,* vol. 118, No. 94, pp. S9179-95. Herinafter, the "Zumwalt-Proxmire Exchange."

9. *MS,* No. 2, 1972, p. 24.

10. *Ibid.,* p. 23.

11. *MS,* No. 4, 1972, p. 23.

12. *MS,* No. 2, 1972, p. 25.

13. *Ibid.*

14. *Ibid.,* p. 29.

15. *MS,* No. 3, 1972, p. 20.

16. For further discussion of Gorshkov's "big-navy" theme, see Herrick, "The Gorshkov Interpretation of Russian Naval History," as contained in Michael K. MccGwire, ed., *Soviet Naval Developments: Capability and Context* (Halifax: Centre for Foreign Policy Studies, 1972), pp. 275-89; and Robert W. Herrick, "Soviet Navy Commander-in-Chief Advocates Construction of a Much Larger Navy," Working Paper, Center for Naval Analyses, Arlington, Va., 9 May 1973.

17. *MS,* No. 3, 1972, p. 22.

18. *MS,* No. 6, 1972, p. 14.

19. *Ibid.*

20. *MS,* No. 3, 1972, p. 22.

21. *Ibid.,* p. 20.

22. *MS,* No. 2, 1972, p. 24.

23. *Ibid.,* p. 27.

24. *MS,* No. 8, 1972, p. 18.

25. *MS,* No. 2, 1973, p. 19.

26. *Ibid.*

27. *MS,* No. 3, 1972, p. 22.

28. *MS,* No. 4, 1972, p. 22.

29. *Ibid.*

30. *Ibid.,* p. 23.

31. *Ibid.,* p. 23.

32. *MS,* No. 3, 1972, p. 24.

33. *Ibid.,* p. 31.

34. *MS,* No. 2, 1972, p. 23.

35. *Ibid.*

36. *Ibid.*

37. *MS,* No. 5, 1972, p. 24.

38. *MS,* No. 2, 1972, p. 29.

39. *MS,* No. 5, 1972, p. 22.

40. *MS,* No. 2, 1972, p. 29.

41. *MS,* No. 12, 1972, p. 16.

42. *Ibid.*

43. *MS,* No. 3, 1972, p. 27.

44. *MS,* No. 2, 1973, p. 21.

45. *MS,* No. 4, 1972, pp. 13-14.

46. *MS,* No. 2, 1972, p. 21.

47. *Ibid.,* p. 20.

48. *Ibid.,* pp. 21-22.

49. *MS,* No. 3, 1972, p. 26.

50. *Ibid.,* pp. 20-21.

51. *Ibid.,* p. 21.

52. *MS,* No. 6, 1972, p. 14.

53. As if in illustration of this concept, Gorshkov, in the name of the Soviet Union, deployed over 90 ships into the Mediterranean during the recent Arab-Israeli crisis. This was the highest number of Soviet Navy ships ever deployed to the Mediterranean at one time and is over twice the size of the normal Soviet Mediterranean Squadron.

54. *MS,* No. 3, 1972, pp. 32-33.

55. *MS,* No. 2, 1972, p. 20.

56. Both Admiral Gorshkov and Admiral Zumwalt are in essential agreement on this. As Admiral Zumwalt stated in the Zumwalt-Proxmire Exchange:

> . . . a direct comparison of the two fleets, unless heavily footnoted, cannot mean very much. With very few exceptions, U.S. ships are not designed to fight Soviet ships of similar

classes. Therefore it is of little value to contrast . . . characteristics. . . . What is important is how well the platform, or the fleet, can carry out its assigned tasks.

57. Michael K. MccGwire, "The Gorshkov Series—'Navies in War and Peace'—a Summary Report," Working Paper, Center for Naval Analyses, Arlington, Va., 8 May 1973, p. 2.
58. *MS*, No. 5, 1972, p. 24.
59. *MS*, No. 8, 1972, p. 14.
60. *MS*, No. 12, 1972, p. 18.
61. *MS*, No. 8, 1972, p. 24.
62. *MS*, No. 9, 1972, pp. 14-15.
63. Two *Kiev* class carriers are currently under construction there.
64. *MS*, No. 2, 1973, p. 19.
65. *Ibid.*
66. *Ibid.*
67. *Ibid.*
68. *Ibid.*, p. 20.
69. *Ibid.*
70. *Ibid.*, p. 19.
71. *MS*, No. 2, 1973, p. 20.
72. For a full exposition of this possible withholding strategy, see James M. McConnell, "Admiral Gorshkov on the Soviet Navy in War and Peace," Working Paper, Center for Naval Analyses, Arlington, Va., 1 October 1973, pp. 1-21.
73. *MS*, No. 11, 1972, p. 27.
74. *Ibid.*, p. 25.
75. *MS*, No. 2, 1973, p. 20.
76. *MS*, No. 11, 1972, p. 25.
77. *Ibid.*, p. 28.
78. *MS*, No. 2, 1973, p. 20.
79. *Ibid.*, pp. 21-22.
80. *MS*, No. 4, 1972, p. 11.
81. *MS*, No. 2, 1973, p. 18.
82. *Ibid.*
83. *Ibid.*
84. *Ibid.*
85. *Ibid.*
86. *Ibid.*, p. 14.
87. *Ibid.*, p. 18.
88. *Ibid.*
89. *Ibid.*, pp. 13-14.
90. *Ibid.*, p. 18.
91. *Ibid.*, p. 19.
92. *Ibid.*
93. *Ibid.*, p. 16.
94. *Ibid.*, p. 18.
95. *Ibid.*, p. 15.

Ψ

Superiority in naval power will henceforth consist in keeping up a proper naval establishment in discipline. The first naval nation to fall will be the one that is first caught napping.

Sir Charles Napier, 1786-1860

The multipolar balance of power has often been referred to as that system which is best to preserve world stability and peace. However, there are others who view the system's complexity as a certain roadblock to the goal it seeks. The opportunities for breakdown in a multipolar system are great indeed, but the flexibility it offers may provide the most viable program for future world peace.

A MULTIPOLAR 1984:

SPECULATIONS ON THE STABILITY OF A BALANCE OF POWER INTERNATIONAL SYSTEM

An article prepared

by

Professor Walter L. Barrows

> We must remember the only time in the history of the world that we have had any extended periods of peace is when there has been balance of power. It is when one nation becomes infinitely more powerful in relation to its potential competitor that the danger of war arises. So I believe in a world in which the United States is powerful. I think it will be a safer world and a better world if we have a strong, healthy United States, Europe, Soviet Union, China, Japan, each balancing the other, not playing one off against the other, an even balance.
>
> President Nixon in *Time*

With this remarkable statement, President Nixon has joined the time-honored debate among international relationists about the desirability of "balance of power" systems. Granted certain historical inaccuracies—balance of power systems easily have seen their fair share of war and suffering, while unipolar hegemonic systems have produced many a "generation of peace"—and granted the familiar conceptual pitfalls to which balance of power thinking is subject,[1] still the statement is couched in terms to which international relationists can respond. With our reasonably well-developed literature and dialog on balance of power models,[2] we should be in a well-placed position to assess Nixon's vision of the emerging global system. This is not to say that scholars can provide definitive judg-

I am heavily indebted to my colleagues E. Thomas Rowe, Raymond Duvall, and Gordon Tullock for many of the ideas expressed in this paper.

ments; we know too much about our ignorance to be so foolhardy. But we can speculate carefully, in a manner disciplined by the historical knowledge and analytical tools which have developed over the past few decades in the field of international relations.

Clearly the pentagonal system which Nixon describes has not yet emerged. Biopolarity may have given way to multipolarity in certain spheres of life (e.g., economic and technological), but in what Stanley Hoffmann calls "high politics" (military-strategic-political), the United States and the Soviet Union still dominate. Japan and Western Europe depend for their ultimate security upon the United States, and China is too hampered by economic and technological underdevelopment to yet claim great power status on a global (as opposed to regional) scale. So for the next few years an "even balance" in the 19th century sense—which seems to be the basis for Nixon's neo-Metternichean vision—cannot materialize, simply because of huge power inequalities among the five major actors. But what about a longer timespan, say 10 or 12 years? Suppose the world system continues to develop along its present course, with its tendency to equalize power among the "Big Five," what kind of a world will it be in a decade or so? We can pose the question more carefully. Assuming that in 1984 the international system is composed of five major actors of more or less equal power and that "balance of power" policies are the prevailing mode of interaction, how peaceful will this system be?

Before proceeding, however, it is necessary to scrutinize this basic assumption of rough equality among the five great powers of 1984. Simply put, it is not a realistic assumption. The figures below represent indicators of two dimensions of "power" (GNP and military expenditure) for 1970 and 1984. Note that it is only with the most

1970: GNP AND DEFENSE EXPENDITURES

	GNP ($ billions)	Defense Expenditures as % of GNP	Defense Budget ($ billions)
United States	977	8	78
W. Europe	660	3.7	24
U.S.S.R.	497	10	50
Japan	197	0.8	2
China	120	8.3	10

1984: "GENEROUS" ESTIMATES OF GNP AND DEFENSE EXPENDITURES

	Assumed Av. Annual GNP Growth Rates	Estimated GNP ($ billions)	Estimated Defense Expend. as % of GNP	Estimated Defense Budget ($ billions)
United States	3%	1480	5	74
W. Europe	5	1300	5	65
U.S.S.R.	7	1280	5	64
Japan	10	750	10	75
China	10	455	15	68

Source: U.S. Arms Control and Disarmament Agency, Bureau of Economic Affairs, *World Military Expenditures 1971* (Washington: 1972), pp. 10-12.

generous estimates of economic growth and reallocation to defense considerations in Japan and China—as well as marked decreases in U.S. economic growth and Soviet defense expenditures—that power parity is achievable. For China to average an annual 10 percent growth in GNP between 1970 and 1984 is nearly inconceivable; it is almost as difficult to imagine Japan building a major military force and sustaining her economic growth boom simultaneously. Both feats would require extraordinary efforts. This calls attention to a second, more hidden, assumption, that the disruptive impact of new entrants into the central international system will not be sufficient to destroy it. For the global system of 1984 to be composed of five actors whose power is more or less equal, three of them will have to move swiftly up the international power hierarchy in order to "catch up" with the two superpowers. Such rapid mobility is a destablizing force. Established great powers cannot help but view with trepidation the onrush of new competitors whose capabilities are increasing but whose intentions are not yet clear. For instance, consider a Soviet Union flanked on the west by an increasingly assertive Western Europe and on the east by Japan and China striving full tilt toward great power status. The temptations for at best obstructive tactics and at worst preemptive war may well prove irresistible. That is, one or both of the superpowers may act to prevent the emergence of a fully multipolar system. Hence, the process of creating a multipolar system may sow the seeds of its own destruction. For our purposes, however, we shall simply assume that a multipolar system exists in 1984, without inquiring into the dynamics by which it came about. It is worth noting, though, that were this assumption to be relaxed by more thoroughly treating the destabilizing impact of rapid power mobility, the conclusions of this paper would have to be reconsidered.

II

How peaceful would a multipolar balance of power system be in 1984? In attempting to deal with this question, it seems wise first to stipulate a conceptual framework (paradigm) which suggests and organizes variables relevant for the problem at hand. It has become common in political science to think in terms of "systems"; furthermore, any political system—whether local, regional, national, or international—can be analyzed in terms of interrelationships among its basic features:[3]

Structure (e.g., multipolarity)
Norms (e.g., balance of power rules)
Behavior (e.g., peace or war)
Environment (e.g., biophysical resources).

The particular system under consideration here—the global political system of 1984—can be adumbrated according to these categories.

The *structure* of the system will be, by assumption, multipolar. This means that relations among five or more major actors of roughly equal power (however defined) determine in large part the constraints upon and opportunities for behavior for the major actors as well as for the many minor actors in the system. We can describe its structure further by noting two contemporary trends which are loosely linked with the movement toward multipolarity and which, if projected a decade into the future, would make the system of 1984 structurally more complex than the term "multipolarity" would suggest. The first is a trend toward sharper systemic discontinuities; that is, there is a tendency for regional subsystems (e.g., the Middle East) to evolve which are imperfectly coupled with the wider system. "The discontinuities model . . . stresses the importance of both systemwide and regional factors and emphasizes the complex patterns of their interpenetration, leaving room for shifting weights with regard to the

question of which factor is dominant."[4] The second trend is the growth of transnational organizations (e.g., Exxon) in numbers and importance.[5] Assuming that this trend continues, the conventional territorial state in 1984 will be supplemented by a new kind of international actor whose major structural impact will be to facilitate the flow of resources across political jurisdictions, in effect diffusing the boundaries of the actors in the system.

These two tendencies reinforce the impact of multipolarity upon a key feature of the system's structure—complexity. Almost by definition multipolar systems are more complex than bipolar systems, other things being equal, but evolving discontinuities and the proliferation of transnational actors will render any future system even more complex. The system of 1984 is likely to be "entropic"—characterized by increasing decentralization, disorganization, variety, and uncertainty.[6]

The *norms* of the system comprise the independent variable in this analysis. Given a multipolar structure in 1984, would the system be peaceful were a "balance of power" normative set to prevail? Easily the "hoariest concept in the field of international relations,"[7] balance of power has acquired so many meanings that its intellectual utility is suspect, but statesmen and generals continue to attach significance to it, and for that reason alone it is worthy of analysis, as a research datum, so to speak. Its meaning here defines it as a part of the international political culture, a congeries of attitudes and prescriptions about politics and policy. The literature on balance of power is replete with calls for vigilance, military preparedness, realism, and prudence on the part of statesmen, but the most systematic formulation is found in Morton Kaplan's familiar "essential rules" for balance of power systems:[8]

1. increase capabilities, but negotiate rather than fight;
2. fight rather than fail to increase capabilities;
3. stop fighting rather than eliminate an essential actor;
4. oppose any coalition or single actor that tends to assume a position of predominance within the system;
5. constrain actors who subscribe to supranational organizational principles; and
6. permit defeated or constrained essential national actors to reenter the system. . . .

As a policy guide for international actors, these rules set up a dynamic tension between competitiveness and restraint, between military and diplomatic courses of action, and between self-assertiveness and common cause. They recognize strategic interdependencies but stress the ultimate need for self-reliance and autonomy; that is, except for coalitions designed to check the power of rivals, international cooperation is dismissed as a constraint upon an actor's freedom to maneuver. Actors are envisioned as isolated, linked structurally only by common membership in a strategic system. Put differently, the caste of mind reflected in balance of power prescriptions is appropriate for systems whose actors are relatively unencumbered by interdependencies—economic, technological, demographic, ideological, et cetera—which derive either from structural elaborations within the system or from common responses to the system's environment or both. The essential "boundedness" of actors is a key assumption underlying balance of power thinking. A question then arises, to what extent is this assumption likely to be met in the system of 1984, and if it turns out not to be an appropriate assumption, what effect will this have on the likelihood of war?

The purpose of these balance of power rules is to maintain a stable system through preserving its major actors; maintaining peace is important

only insofar as war—e.g., nuclear war—threatens the existence of major actors and hence the system itself. Peace and stability are not synonomous. It is perfectly possible—and indeed the historical record more than adequately bears this out—to have a stable balance of power system which experiences extensive violence. The question which concerns us most is, given the structural and environmental conditions of 1984, how strong will the incentives be for actors to apply rule number 1 ("negotiate rather than fight") compared with the incentives for rule number 2 ("fight rather than fail to increase capabilities")? Assuming that actors are rational,[9] the ratio of costs to benefits of negotiation *versus* the cost-benefit ratio of fighting will determine which rule will prevail at any particular time for any particular actor. Highly deterministic language need not be read into this formulation. We may simply say that there is a significantly higher probability that one rule will be preferred over another if the incentives are appropriate. Furthermore, we need not say that norms determine behavior, only that the choice of a particular rule significantly increases the probability that a certain kind of behavior will ensue. The choice between rule number 1 and rule number 2 will have a large bearing on whether behavior in the system of 1984 is peaceful or warlike.

The *behavior* of the system a decade from now embraces our dependent variable. What is the likelihood that the system will experience violent confrontations among or between major actors? Our strategy for speculation entails forming admittedly subjective judgments about the chances for peace or war in a balance of power system, given certain structural and environmental conditions extrapolated to 1984 from contemporary trends.

Or, to assume a cybernetics perspective, we may treat "peace" as a desired outcome and then speculate upon the ratio of disturbing variety to regulatory variety likely to obtain. Disturbances (D) from within the system and from its environment must be at least matched by its regulatory capacity (R), or else the desired outcome will disappear. The Law of Requisite Variety states that "only variety in R can force down the variety due to D; only variety can destroy variety."[10] Historically, in balance of power systems the regulatory mechanisms have included such devices as war, shifting alliances, the holder of the balance (e.g., Great Britain), territorial and other kinds of exchanges to compensate for power imbalances, intermittent conferences such as the Concert of Europe, and, importantly, the self-restraint of major actors due to limited objectives, fear of concerted retaliation and/or commitment to the system (what Kissinger calls the "legitimacy" of the system).[11] These typically have aimed at "stability" as the desired outcome, but we are interested here in "peace." What are the chances that these mechanisms—plus whatever additional mechanisms evolve by 1984—will contain enough flexibility (variety) to regulate the disturbances likely to be produced by the system and its environment? It should be emphasized that we are identifying a balance of power system with a particular normative orientation, not with a particular set of regulatory mechanisms. Hence, we are not asking whether certain mechanisms (e.g., shifting alliances or territorial exchanges) will exist in 1984, but rather whether the mechanisms that do arise (whatever they are) will be adequate for managing the inevitable disruptions from within and without the system.

A political system's *environment* includes everything that impinges upon it from outside its boundaries. This can include other political systems, but in the case of a global system the most relevant environment is biophysical and cultural. The environment can be envisioned as supplying needed tangible

resources—food, energy, materials, space, repositories for waste, clean air and water, et cetera—to the system.[12] These resources are limited, the scarcity of a particular resource being a function of its availability and the value attached to it by the actors of a system. The environment also supplies intangible resources, most notably ideas and knowledge in the form of technology. The supply of technology is not fixed, except over very short time intervals, and technological development can change both the supply of and demand for particular tangible resources. Hence, the environment's impact upon a system can vary widely with changes in technology and shifts in the value preferences of actors.[13] Developments which increase environmental supply—e.g., improvements in transporation which make available a greater variety of commodities—enhance the regulatory capacity of a system by dampening competition among actors for the same resources. On the other hand, an environment whose supply is decreasing—e.g., the contemporary "energy crisis"[14]—or whose predictability is decreasing—e.g., the impact of technology on weaponry—magnifies disturbances within the system by intensifying the struggle for scarce resources. Furthermore, the environment interacts with the system through "externalities"; that is, the behavior of one actor may inadvertently affect another through its impact on the environment, e.g., pollution, fallout, blocking a canal.[15] Like resource demand and supply, the extent to which externalities are present is determined largely by technology. Some technologies increase externalities and some decrease them, although it is probably fair to say that the overall impact of technology through the centuries has been to increase interdependencies among actors.

The environment of the contemporary system has, among others, the following features:

- Increasing scarcity. One need not accept the extreme predictions of the *Limits to Growth* model[16] to appreciate how demands are presently increasing at a faster rate than supplies. Even if the environment actually is responding adequately to increased demands upon it, the *perceptions* of actors about their surroundings today generally envision growing constraints and dwindling supplies, and, after all, the policies of actors are influenced by what the Sprouts call the "psychomilieu" rather than the "operational (actual) milieu."[17] There is no inevitability to this trend, but if we assume that it continues throughout the decade, the system of 1984 will be characterized by sharp rivalries among major actors for environmental supply.
- Increasing uncertainty. Technology has been growing at an exponential rate for the past three centuries, and there is no reason to assume that this trend will abate. As mentioned before, the impact of new technologies upon a system is unpredictable. A particular development might increase or decrease resource supply, enhance or diminish preferences for particular resources, widen or contract externalities. Moreover, the secondary and tertiary effects of a technology upon any or all aspects of a system are extremely difficult to predict. Military security is a critical area heavily affected by the technological environment. It has become commonplace to note the disruptive potential of "qualitative" changes upon the existing "stable mutual deterrence" among nuclear superpowers. Lasers, military satellites, nuclear-powered aircraft, chemical and biological warfare, weather control, genetic control, thought control—these are some of the most obvious candidates for technological application within the next decade or so. Consider the disturbing effects of a "breakthrough" in antisubmarine warfare if it were to occur before land-based missiles become obsolete, now

expected toward the end of the 1970's.[18] Consider, further, the impact of not two, but five or more centers of advanced military research and development, a condition implied by a combination of multipolarity and balance of power rules of the game. Assuming (realistically) that this technological trend will continue for the next decade, the uncertainty factor in the system of 1984 is likely to weigh heavily upon the decisions of its constituent actors.

• Widening externalities. Technology today, especially in the field of communications, has the effect of increasing interdependencies. Events in one country ramify across its boundaries to its neighbors, e.g., *coup* contagion in Africa or the spread of student demonstrations among Western democracies. Pollution, space travel, exploitation of the seabed, and international currency flows are other areas in which actors in the contemporary system are increasingly prone to overlapping jurisdictions. Some of these externalities are positive—e.g., shared information from weather satellites—and some are negative—e.g., radioactive fallout—but the overall impact upon the system of 1984, given a continuation of the present trend, will be a diminution of the "boundedness" of the separate actors. The "penetrated state" with "permeable boundaries" already characterizes international relations today;[19] it is likely to prevail even more so in the system a decade from now.

III

We have constructed a descriptive model of a system in 1984 which, compared to the contemporary system, is more loosely structured and more unpredictable, is inhabited by actors whose boundaries are less distinct and whose environment is less plentiful, and is informed by rules of the game which place more emphasis on military action, power checking, and self-interest. At first blush the system seems ripe for war, if for no other reason than its sheer "messiness." Especially with nuclear proliferation, there seems a great potential for conflagration due to actors seeking to protect themselves—perhaps through preemptive strikes—against hidden dangers, blackmail, and rivals for scarce environmental supply. Or, to use our cybernetic perspective, variety which tends to disturb peace as the desired outcome is unlikely to be adequately regulated in so disorganized a system as the one envisioned here, particularly given the competitiveness of balance of power norms. This is the kind of conclusion which has been reached recently by an impressive number of eminent international relationists.[20]

But perhaps such conclusions underestimate the adaptability of complex social systems. Systems theorists are wont to sermonize about the structure-elaborating, self-regulatory, and responsive nature of living systems,[21] and perhaps we should take their advice more to heart.

First, there is the question of flexibility. It is true that as entropy (disorder) in a system increases, the potential for disturbing variety also increases; but, by the same token, so does the potential for regulatory variety, although not necessarily in the same proportion. Deutsch and Singer have pointed out that as we increase the number of major actors in a system, the opportunities for dyadic interactions and associations increase dramatically.[22] Further structural complexities from regional subsystems and from transnational organizations add to the possibilities for new combinations, recombinations, and transactions among elements in the system. The point is simply that the model we have constructed is pregnant with novel arrangements—mutations, so to speak—which may serve to regulate violence or at least to alleviate the conditions which lead to

violence. We should not close our eyes to new possibilities nor automatically assume that the classical mechanisms (e.g., the "holder of the balance") will hold the key to peace in the future system.

One such possibility which is not particularly novel but which has already acquired new importance as bipolarity shades into multipolarity is the international conference. SALT, CSCE, MBFR, the U.N. Conference on the Human Environment, the upcoming Law of the Sea Conference—not to speak of frequent trade and monetary conferences—all are examples of "assemblies" which emerged as regulatory responses to complicated problems. Perhaps this trend, or some variant, will provide a major regulatory mechanism in the future. Note that this form of international association does not violate number 5 of the balance of power rules ("constrain actors who subscribe to supranational organizational principles") since such conferences are *ad hoc* and rely essentially upon the voluntary and self-interested compliance of actors, not upon collective authority. They are somewhat analogous to the 19th century Concert of Europe, except that they are more complex and their goals are different. The intent here is not to predict, but simply to suggest in pedestrian fashion one possibility for a system which is likely to be ripe with potential.

Second, the uncertainty inherent in the system need not induce recklessness and near-automatic resort to preemptive violence among actors. Indeed, a rational actor faced with uncertainty has incentives to calculate conservatively and cautiously, for fear of risking what he already possesses. Negotiation, even for low payoffs, is likely to be an inviting strategy in situations where there is some undisclosed probability that a violent course of action will incur devastating costs. The costs of negotiation will rise as a system becomes structurally more complex and uncertain; but the costs of violence are likely to increase at a much faster rate, since an actor needs to contend with the retaliation of not one, but many, rivals. Furthermore, the benefits of negotiation are apt to be relatively high in complex situations (other things held equal), since the opportunities for exchange are enhanced as the variety of elements in the system is increased. On the other hand, the benefits from violence probably decrease as a system becomes more complex and decentralized, since the fruits of a victory provide a smaller share of control over the system as a whole; that is, conquering a rival actor in a multipolar system still leaves you facing a number of other actors, whereas victory over a bipolar rival means control (no doubt temporary) of the whole system. In short, there is reason to believe that in the 1984 system modeled here there will be a much stronger incentive to favor balance of power rule number 1 ("negotiate") over rule number 2 ("fight").

This argument holds even for a world of nuclear powers. There has been a tendency in international relations to accept unthinkingly the notion that nuclear dispersion leads automatically to much greater risks of conflagration than nuclear exclusiveness. This may be ture, but the logic behind an n-actor "stable mutual deterrence" has been given much less attention than the usual two-actor case. A recent collection edited by Richard Rosecrance has addressed itself to this problem; it contains a surprising number of opinions which suggest that stability *increases* as the number of nuclear-armed actors rises.[23] Much depends, of course, upon the quantity and quality of each actor's weapons and upon inequality among actors, but the basic disincentive to attack—fear of third-party retaliation—remains strong in multipolar arrangements. Two features of our 1984 system

enhance this disincentive to strike first. Balance of power norms encourage actors to punish (rule number 4) and exploit (rule number 2) other members of the system who engage in nuclear exchanges. And the effect of uncertainty reduces the expected value of nuclear adventurism:

> In the previous bipolar system, deterrent credibility was presumably provided by the *certainty* of punishment if certain aggressive or provocative military actions were taken. . . . But the system of multipolarity will itself be uncertain. Once military action is taken, given the existence of five powers and the possible relationships, an aggressor just cannot know what will happen. . . . His nuclear attack upon one power may lead to a series of nuclear attacks by other powers; the position he will finally derive in economic, military and status terms will be unclear, even opaque. He cannot foresee the consequences of his own action.[24]

Critics of balance of power often cite the difficulties inherent in making the fine calculations of military and other kinds of power in order to achieve the "balance" that holds the system together.[25] But this very difficulty provides a safety margin. Actors will be untempted to exploit a perceived power superiority if, in an uncertain world, they distrust their own calculations.

Third, while it is true that there exists in our model a contradiction centering on the "boundedness" of actors—structurally the model builds in interpenetrations among actors while normatively it presumes actor autonomy—this contradiction need not dispose the system toward violence. Indeed, to the extent that dependencies are mutual and more or less equally distributed among actors, violence as a rational course of action will be discouraged. An actor which is connected to all other elements of the system by myriad transnational organizations, exchanges, and externalities will likely tug gently, not violently, on the ties that bind. If vital spheres of national life are merged inextricably with the international system, prudence will be the watchword. Actors may rail against pervasive dependence on outsiders, but they are unlikely to jeopardize national existence through aggressive moves. In such circumstances bargaining holds out more prospects than battle; maneuvering at the margin provides better insurance for national survival than going for broke. In short, interdependencies impose restraints. Negotiation is a more attractive mode of competition than fighting when mutuality attaches to every move.

(These comments should be tempered by noting the central importance of our assumption that the major actors are roughly equal in terms of the things that count for international politics. If, for instance, three actors were thoroughly penetrated by the rest of the system while two remained significantly more autonomous, it cannot be assumed that violence would prove an untempting strategy for an actor wishing to improve or maintain its relative power standing. Inequality of outside dependence among actors may entice an actor to exploit its relative autonomy through violent means, or a heavily penetrated actor may consider its bargaining position untenable and resort to violence as the only remaining way to compete. The equality assumption exerts similar influence upon the other conclusions of this paper.)

Rule number 5 ("constrain actors who subscribe to supranational organizational principles") would seriously hamper efforts to deal collectively with common problems. Often the most effective way to treat negative externalities (e.g., pollution) is to set up a collective authority with the power to compel actors to adhere to agreed upon policies. But such arrangements would

violate the spirit and letter of balance of power norms, which restrict cooperative efforts to *ad hoc* and voluntary modes of action. Hence, a balance of power system in 1984 would tackle important problems in less than adequate fashion. Pollution, resource depletion, exploitation of the seabed, space exploration, arms control—such issues would be left to the hazards of decentralized control, where the more important the matter, the more each actor would insist on its own discretion in deciding the proper mix of cooperation and competition. This is not to say that common problems will be ignored nor is it to say that violence will be made more likely if such problems remain unsolved; it simply means that the system's response to them will be less than optimum. Balance of power rules represent a constraint on the system's ability to elaborate higher structures of authority.

Fourth, and finally, worsening environmental scarcity will lead to unrestrained—violent—competition among actors only in special circumstances. Living systems have diverse adjustment mechanisms for adapting to changing milieus. It is only when scarcity is increasing at a faster rate than the system's ability to adapt that breakdown is imminent. Our model of the 1984 system, because of its structural complexity and its technological dynamism, possesses an inherently high potential for adaptability and adjustment. True, its balance of power norms will impede collective responses to common environmental challenges and will encourage actors to work at cross-purposes; but, on the other hand, balance of power competitiveness will most likely enliven the decentralized activism of the system, which is, after all, the essential source of its flexibility. The underlying analogy here is with *laissez-faire* economics, which relies upon the self-interested behavior of many actors to generate the system's responsive capacity. An analogy suggested in domestic controversy may create more heat than light, but it seems appropriate for a system as decentralized as the one being modeled here.[26]

Exchange—of goods, people, resources, information—is a principal mechanism by which social systems adjust to their environments. The more the exchange opportunities within a system, the greater the potential for allocating scarce values in an efficient manner; the pressure of scarcity is eased by the "gains from trade." Hence, an important question is whether scarcity is increasing at a faster rate than exchange interactions. Violent conflict becomes more likely when actors are no longer able to satisfy their demands through reciprocation. Or, as Deutsch and Singer put it: "[I]n a system characterized by conflict-generating scarcities, each and every increase in opportunities for cooperation (i.e., to engage in mutually advantageous trade-off), will diminish the tendency to pursue a conflict up to and over, the threshold of war."[27] Needless to say, the 1984 model is structured in a way which provides myriad opportunities for exchange: between major actors, between major actors and minor actors, between minor actors, between the central system and regional subsystems, between subsystems, and between any of the above and transnational organizations. Moreover, as trade opportunities increase, the variety of values likely to be drawn into the exchange nexus is also likely to increase. We need not confine our analysis to the conventional items—commodities, currencies, people—normally considered in the field of international economics. The Lasswellian values—power, wealth, respect, skill, enlightenment, safety, et cetera—better express the scope of our concern.[28] Power may be traded for wealth, which in turn may be converted into respect, which then might be exchanged for more power. Complicated trade-offs of this nature are already

becoming prominent in the contemporary international system. East-West relations today seem to be entering a pattern whereby "wealth," "enlightenment," and "respect" are used as compensation by the NATO powers to induce a reduction of tension–"safety" –on the part of the Soviet bloc countries; that is, by transferring wheat and technology, by accepting the *status quo* in Eastern Europe, and by recognizing the Soviet Union's status as a coequal nuclear power, the United States and NATO have been able to extract various concessions (*viz.*, Berlin, Vietnam) which serve to relax cold war stresses. In closing such "package deals," actors make commensurable values which were not previously exchanged. New values lend fluidity to international relations, heightening the probability that mutually profitable interactions will take place despite tightening scarcity of tangible resources. In short, the system of 1984, by virtue of its structural complexity, boasts an emergent exchange network which can go a long distance toward meeting the challenges of a physical environment growing more niggardly by the day. Whether this adjustment mechanism will be fully sufficient depends, of course, upon the relative rates of growth of the two opposing forces, exchange opportunities, and scarcity.

Closely related to exchange is the price mechanism. As a good becomes more scarce, its price rises. This not only reduces demand, but it also enhances the profitability of technological innovations designed to make the good less scarce.[29] Prices and technology, then, are two additional processes by which system-environment adjustments are made. The price mechanism can be envisioned as an extremely flexible regulatory device through which environmental scarcities are signaled to decisionmakers within the system.

In the system of 1984, however, major actors are unlikely to be satisfied with the price mechanism alone, especially in the field of technology. The balance of power game played for high stakes will assure that each actor invests considerably in research and development in order to secure supplies of needed resources, anticipate future needs, and invent substitutes for costly goods. (Examples from the contemporary system are increasingly available, e.g., the "national energy policy" being formulated by the United States.) Put differently, self-interested actors are likely to supplement the strictly "private" relationship between prices and technology by allocating significant "public" energy to the development of useful knowledge. Indeed, it is probably correct to say that more resources will be invested in techniques for dealing with the environment in a balance of power system than in one where a less competitive set of norms prevails. What cannot be predicted is whether the gains from this larger total investment will outweigh the losses from actors working at cross-purposes, a condition encouraged by balance of power rules. Whatever, the basic point is that technological development represents a major means by which the system of 1984 will respond to environmental scarcities and that balance of power norms can be expected to augment its impact.

These "economic" responses to increasing scarcity do not by any means

BIOGRAPHIC SUMMARY

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exhaust the possibilities for systemic adjustment to a changing environment. A more "political" reaction might entail actors carving out for themselves exclusive geographical areas of predictability and security of environmental supply. The core of each area would, of course, be the national territory of the actor itself, but its periphery might extend well beyond, in effect expanding the actor's boundaries to coincide with a regional subsystem. The effect would be to heighten between-region discontinuities but to reduce them within regions. This seems a reasonable prediction for the system of 1984. As actors strive to master uncertainty and to gain for themselves reliable resource sites, they will likely step up their efforts close to home where they can maximize control and regularize exchange relationships. Fairly well-defined "spheres of influence" are likely to emerge—regional subsystems, each dominated by a major actor. Intensive intraregional rather than extraregional development will become the prime mode of competition. Some spheres of influence will be easier to define than others. The United States in the Americas, the Soviet Union in Eastern Europe, Western Europe in Africa—these seem clear-cut possibilities. But the boundary between, say, Japanese and Chinese spheres of influence or between Soviet and West European claims in the Mediterranean—these may remain sources of ambiguity and tension. Perhaps the Middle East will develop its regional autonomy undominated by a major actor, and likely areas such as the high seas will retain their "no man's land" character.

It should be immediately observed that were regionalization to proceed to such an extent that it subsumed other structural features of the system, it would counteract a number of attributes which we have considered desirable from the point of view of promoting peace. That is, the more the system assumes a clear-cut "multibloc" character, the less it can be described as structurally ambiguous, decentralized, and diffuse—and the less mutually overlapping interests as well as uncertainty can be counted on to restrain the behavior and ambitions of actors.[30] Should the system of 1984 respond to environmental scarcity by elaborating a new simpler structure based primarily on regions, its most appealing property —complexity—will have been diminished.

IV

In speculating upon the prospects for peace in a multipolar 1984, we have put forward the proposition that a balance of power system need not be so war-prone as many critics have intimated. The system is constructed in such a way that competitive actors seeking self-interest are likely to shun or at least minimize war as a rational course of action. Balance of power rules work to secure the independence of major actors through checking relationships among mutually suspicious rivals; if, at the same time, they can be made to encourage prudence and self-restraint among these same actors, then the probability of war is reduced significantly. The interaction of the system's structure and environment with these norms, we have said, promotes peaceful behavior.

These optimistic conclusions, however, should be interpreted with the same tentative spirit as that with which they are delivered. Model building is an exploratory exercise carried out by fitting together assumptions which have been made explicit and ferreting out those left implicit. The crude descriptive model presented here is composed solely of assumptions, any one of which is open to challenge; perhaps more importantly, hidden suppositions color the conclusions which can be drawn from it. For instance, we have taken it for granted that major actors will com-

mand a decisionmaking capacity commensurate with the complicated world which we envision for 1984; implicit has been the assumption that *all* the great powers, however rational, can to a high degree tolerate ambiguity, process communications, handle uncertainty, impose self-control, and maneuver flexibly.[31] Decisionmaking overload will be a formidable peril for the future system. If actors respond to complexity and confusion by locking themselves into preprogramed courses of action in a manner akin to the rigid alliances and irreversible military plans which preceded the onrush of World War I, then uncontrolled violence is a likely outcome. If, on the other hand, they mobilize the requisite internal resources for playing the labyrinthine game of politics predicted for 1984, then peace is a considerably more likely prospect.

NOTES

1. Ernst Haas, "The Balance of Power: Prescription, Concept or Propaganda?" *World Politics*, July 1953, pp. 446-477.

2. Hans Morgenthau, *Politics Among Nations* (New York: Knopf, 1967); Inis Claude, *Power and International Relations* (New York: Random House, 1962); Quincy Wright, *A Study of War* (Chicago: University of Chicago Press, 1964); Richard Rosecrance, *Action and Reaction in World Politics* (Boston: Little, Brown, 1963); Morton Kaplan, *System and Process in International Politics* (New York: Wiley, 1957); Harold Lasswell, *World Politics and Personal Insecurity* (New York: McGraw-Hill, 1935).

3. For a lucid introduction to systems thinking, see Walter Buckley, *Sociology and Modern Systems Theory* (Englewood Cliffs, N.J.: Prentice-Hall, 1967). The particular division of systems into structure, norms, behavior, and environment is an adaptation of David E. Apter and Charles F. Andrain, *Contemporary Analytical Theory* (Englewood Cliffs, N.J.: Prentice-Hall, 1972), introduction; and Samuel H. Beer and Adam B. Ulam, *Patterns of Government* (New York: Random House, 1962), part 1.

4. Oran Young, "Political Discontinuities in the International System," Robert L. Pfaltzgraff, Jr., ed., *Politics and the International System* (Philadelphia: Lippincott, 1972), p. 122.

5. On transnational organizations see the Summer 1971 issue of *International Organization*, edited by Joseph S. Nye and Robert O. Keohane; also, Samuel P. Huntington, "Transnational Organizations in World Politics," *World Politics*, April 1973, pp. 333-368.

6. See the "entropy model" presented in James A. Caporaso, *Functionalism and Regional Integration: a Logical and Empirical Assessment* (Beverly Hills, Calif.: n.p., 1972), pp. 17-24.

7. Kenneth N. Waltz, "International Structure, National Force, and the Balance of Power," *Journal of International Affairs*, vol. XXI, No. 2, 1967, p. 215.

8. Morton A. Kaplan, "Some Problems of International Systems Research," *International Political Communities* (Garden City, N.Y.: Anchor Books, 1966), p. 472. See also Kaplan, *System and Process in International Politics.* Kaplan leaves us unclear about how to treat his "essential rules." They can be interpreted as functional requisites for stability, as empirical propositions about the behavior of actors, or as prescriptions internalized by the actors of a system. In this paper they are interpreted in the latter manner.

9. The assumption that actors are rational—i.e., that they will attempt to maximize their utility—is less common in international relations than in economics, where it is the centerpiece of a well-developed body of deductive theory. For a discussion and critique of the rationality assumption in international relations, see Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, 1971).

10. W.R. Ashby, "Self-Regulation and Requisite Variety," in F.E. Emery, ed., *Systems Thinking* (Baltimore: Penguin, 1969), p. 110. Richard Rosecrance, *Action and Reaction in World Politics* (Boston: Little, Brown, 1963) is one of the few instances where the Law of Requisite Variety has affected international relations analysis.

11. Henry Kissinger, *A World Restored* (Boston: Houghton Mifflin, 1957); and Henry Kissinger, *American Foreign Policy: Three Essays* (New York: Norton, 1969).

12. On the notion of environmental supply, see Richard Rosecrance, *International Relations: Peace or War?* (New York: McGraw-Hill, 1973); also Harold and Margaret Sprout, *Towards a Politics of the Planet Earth* (New York: Van Nostrand Reinhold, 1971).

13. See the discussion of the impact of technology in Sprout and Sprout.

14. Actually, the "energy crisis" as far as petroleum fuel is concerned, is as much a result of the impact of the political system on the environment as *vice versa*; that is, fuel shortages have a political cause. See M.A. Adelman, "Is the Oil Shortage Real?" *Foreign Policy*, Winter 1972-73, pp. 69-107.

15. "Externality" is essentially a notion from economics. For political applications see Gordon Tullock, *Private Wants, Public Means* (New York: Basic Books, 1970).

16. Donella H. Meadows, *et. al., The Limits to Growth* (New York: Universe Books, 1972).

17. Sprout and Sprout.

18. Herbert Scoville, Jr., "Beyond SALT One," *Foreign Affairs*, April 1972, pp. 488-500.

19. See the seminal article by James N. Rosenau, "Pre-Theories and Theories in Foreign Policy," R. Barry Farrell, ed., *Approaches to Comparative and International Politics* (Evanston, Ill.: Northwestern University Press, 1966), pp. 65-92.

20. E.g., Zbigniew Brzezinski, "The Balance of Power Delusion," *Foreign Policy*, Summer 1972; Stanley Hoffmann, "Weighing the Balance of Power," *Foreign Affairs*, July 1972, pp. 618-643; Albert Wohlstetter, "Japan's Security: Balancing After the Shocks," *Foreign Policy*, Winter 1972-73, pp. 171-190.

21. E.g., Buckley.

22. Karl W. Deutsch and J. David Singer, "Multipolar Power Systems and International Stability," *World Politics*, April 1964, pp. 390-406.

23. See the chapters by Kaplan, Quester, Harsanyi, Selten and Tietz, and Rosecrance in Richard Rosecrance, *The Future of the International Strategic System* (San Francisco: Chandler, 1972).

24. Rosecrance, *The Future of the International Strategic System*, p. 183.

25. E.g., Lasswell, and Claude.

26. Actually, "monopolistic competition" between a limited number of large firms provides a more appropriate parallel to our multipolar international system than "perfect competition" among a large number of small firms. See E.H. Chamberlain, *Theory of Monopolistic Competition* (Cambridge, Mass.: Harvard University Press, 1962).

27. Deutsch and Singer, p. 396.

28. Harold Lasswell and Abraham Kaplan, *Power and Society* (New Haven: Yale University Press, 1950).

29. See the review essay on *Limits to Growth* by Carl Kaysen, "The Computer that Printed Out W*O*L*F*," *Foreign Affairs*, July 1972, pp. 660-668.

30. Roger Masters, "A Multi-Bloc Model of the International System," *American Political Science Review*, December 1961, pp. 780-798.

31. The domestic requirements for actors in balance of power systems are discussed by Stanley Hoffmann in "Will the Balance Balance at Home?" *Foreign Policy*, Summer 1972, pp. 60-87. Hoffmann is pessimistic about the ability of the United States to muster the required internal resources.

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Politics and arms seem unhappily to be the two professions most natural to man, who must always be either negotiating or fighting.

Voltaire, 1694-1778

THE SOVIET NAVY AND OCEAN LAW

The Soviet Union, by virtue of her strong navy and large merchant fleet, is one of the world's leading maritime powers, a power whose better interests lie with the maintenance of traditional freedoms of the sea. In his comprehensive series of articles on Soviet naval policy entitled "Navies in War and in Peace," Admiral of the Fleet S.G. Gorshkov touches upon the problem of how to reconcile this "conservative" interpretation of sea law with the "progressive" extensions of territorial sea favored by many developing nations. Ideological rhetoric, notwithstanding, it remains apparent that the Russian policy stems from her position as a leading maritime power little served by a radical change in the legal-status quo.

An article prepared

by

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Russian naval policy regarding the law of the sea is in an interesting dilemma. The Soviet state is a considerable maritime power with a strong navy, a large merchant marine, and a very sizable fishing fleet. In order to exploit these assets to the full, the Russian Navy supports traditional legal freedoms of the high seas, so as to give her ships the greatest access to the world's oceans. Such support for traditional laws of the sea puts the Soviet Union alongside other maritime powers like the United States and the United Kingdom, all resisting claims of less developed states to greater national jurisdiction in the oceans. But the Soviet Union is unhappy with a "conservative" label and wants to disassociate herself from Western "imperialists." The Russians seek to demonstrate their solidarity with underdeveloped states which attack great power control of the seas. Russian naval policy thus attempts to reconcile support for traditional sea law with sympathy for the complaints of the underdeveloped states. This reconciliation is, of course, difficult and not altogether successful.

An indication of the problems which Soviet naval ocean policy faces is to be found in the concluding number of a series of articles by the commander in chief of the Russian Navy, Admiral of the Fleet S.G. Gorshkov. The articles, entitled "Navies in War and in Peace," are published in the Russian *Naval Digest (Morskoy Sbornik)* and are an authoritative expression of Soviet naval policy meant for Russian naval officers and those others concerned with Russian maritime strategy. The final installment of "Navies in War and in Peace" appeared in the February 1973 issue of

the *Naval Digest* and was composed of two subsections, "Some Problems of Mastering the World Ocean" and "The Problems of a Modern Navy."[1] The first of these is almost exclusively concerned with law of the sea questions, while the second is a general resumé of all the articles in the series and does not concern us here. "Some Problems of Mastering the World Ocean" has essentially three themes: that the imperialist states are responsible for the crisis in ocean law, that traditional freedoms of the high seas should be preserved, and that a powerful international regime for the high seas is a dangerous proposal.

Admiral Gorshkov argues that the challenge to traditional freedoms of the high seas comes from the imperialist states who seek to divide the resources of the oceans:

> In analyzing the essence of imperialism, Vladimir Ilich Lenin pointed out that financial capital, being afraid of lagging behind in the furious struggle for the still underdeveloped part of the world, is striving to seize as many different expanses of the globe as possible, assuming that they will later become a source of raw materials . . .
>
> In recent decades in the era of the exploitation of the resources of the World Ocean, an ever increasing struggle has begun between imperialist countries for the division of it for economic and military aims, since it is becoming an immediate objective of their expansion.[2]

One would assume from Gorshkov's analysis that it is the Western "imperialist" states which have made large claims to national maritime jurisdictions:

> . . . already today attempts are being made to usurp individual areas of it (the World Ocean) by certain capitalist states and to divide up spheres of influence in it. Thus, voices are being heard in the U.S. Congress calling on Americans to move to the east and by 1980 to occupy the Atlantic Ocean bottom to the Mid-Atlantic ridge, for according to the authors of these statements, when it is a question of the ocean bottom, no one mentions borders: he who takes is right. A highly alarming symptom is the practice of the extension by certain states of the limits of their territorial sea up to 200 miles, which is nothing other than an attempt to seize great expanses of the ocean.[3]

Thus, Gorshkov bends the facts to demonstrate that Leninist theory explains current world ocean problems. Since the imperialist states are forced, in theory, to seize underdeveloped areas of the globe, it must be the imperialist states which are mounting the attack on the freedoms of the high seas by claiming extensive national slices of the seas. But, in fact, the challenge to the traditional freedoms of the high seas is being mounted by the underdeveloped nations. The first claim to a 200-mile territorial sea came from Chile in 1947 when that state established her "protection and control . . . over all the sea included between the perimeter formed by the coast and a mathematical parallel projected out to sea at a distance of two hundred marine miles."[4] In their Santiago "Declaration on the Maritime Zone" of 1952, Chile, Ecuador and Peru proclaimed: " . . . as a principle of their international maritime policy that each of them possesses sole sovereignty and jurisdiction over the area of sea adjacent to the coast of its own country and extending not less than 200 nautical miles from the said coast."[5]

Far from encouraging the 200-mile claims, the Western maritime powers have protested vigorously when the claims have been made. When Chile made her original 200-mile claim in 1948, the United States responded with

a protest note, complaining the "principles underlying the Chilean Declaration . . . appear to be at variance with the generally accepted principles of international law."[6] The continuing American refusal to accept 200-mile claims off the west coast of Latin America is reflected in the conflict between American tuna boats and coastal patrols which surfaces regularly in the daily press. Similarly, the British Government has resisted greater fishing zones off of Iceland and may only be conceding her case now because of NATO pressure.

The Western states have contributed to the crisis in ocean law, but not by making 200-mile claims. The beginning of the challenge to traditional freedoms of the high seas came with the Truman Proclamation of 1945, when the United States claimed jurisdiction over the resources of the Continental Shelf. But the American claim to the shelf was echoed by other nations and finally embodied in the Convention on the Continental Shelf of 1958, which has been signed by most of the nations, including the Soviet Union. The Soviet Union has its own interest in ocean resources. As Admiral Gorshkov puts it:

> The CPSU program calls for not only the utilization of known natural resources, but also prospecting for new ones. The World Ocean is assuming extreme importance in connection with this. The study of it and utilization of resources is becoming one of the greatest state problems aimed at supporting the economic might of the Soviet Union.[7]

Can the Russian "utilization of resources" be distinguished from the imperialists' "seizure" of raw materials? Yes, if you assume that: " . . . the imperialist states are no longer restricting themselves by their own laws on the exploitation of the natural riches of the continental shelf: they are striving to extend their national jurisdictions to the open waters of seas and oceans located vast distances from their shores."[8] But the real challenge to traditional legal freedoms of the high seas comes not from the "imperialist"; rather, it is the voice of the underdeveloped states which is demanding national control over "seas and oceans located vast distances from their shores." As the Asian-African Legal Consultative Committee reported at Colombo in 1971: "Most delegations felt able to accept twelve miles as the breadth of the territorial sea, while supporting, in principle, the right of a coastal state to claim exclusive jurisdiction over an adjacent zone for economic purposes."[9] This demand for an economic zone beyond territorial waters was seconded by the African States Regional Seminar on the Law of the Sea at Yaoundé in 1972:

> The African states have equally the right to establish beyond the territorial sea an economic zone over which they will have an exclusive jurisdiction for the purpose of control regulation and national exploitation of the living resources of the sea and their reservation for the primary benefit of their peoples and their respective economies, and for the purpose of the prevention and control of pollution.[10]

The motivation for the Santiago Declaration, the Colombo Declaration, and the Yaoundé Declaration is the same. The less developed states want to reserve ocean resources to themselves, fearing that the more developed states, "imperialist" or "socialist" alike, will be able to use the traditional freedoms of the high seas to acquire an unduly great proportion of the sea's fish, oil, and minerals. Unless the underdeveloped states restrict the freedoms of the high seas, the rich states with the most advanced techniques will be able to exploit the resources of the oceans most effectively.

In fact, if not in theory, Gorshkov

aligns the Soviet Union with the "imperialists" and not with the underdeveloped world. As the article makes clear, Russian policy is "conservative." The Soviet Navy is in favor of restricting greater claims to national jurisdiction:

> The key to the solution of this question is the strict establishment of limitations on the breadths of territorial seas, since a further extension could create the danger of an actual division of the high seas. Such a danger is already taking shape today, if you consider scientific technical progress and the modern means and practical capabilities which states presently have at their disposal. Based on existing practice and a sensible unity of interests of the coastal states and of the principle of freedom of the high seas, it would seem completely acceptable to limit the breadth of the territorial sea to limits of up to 12 miles.[11]

As we have seen, even if some non-Latin American developing countries might endorse a maximum of 12-mile territorial seas, they are, generally, unwilling to prohibit the extension of an economic zone which would reserve resources to the coastal state. Such an economic zone would not only threaten "imperialist" "seizure" of raw materials but Russian "utilization" of the same.

Even the extension of territorial seas to 12 miles poses problems for the Soviet Union. Key straits, like Gibraltar, would fall within territorial seas. Accordingly, Gorshkov proposes: "... in those straits which connect the open seas and are used for international shipping, all transiting ships (and in the wider straits also passing aircraft) must be accorded equal freedom of transit and overflight."[12] It is not surprising that, in this matter, the interests of the two great naval powers should coincide and that Gorshkov's call for "equal freedom of transit and overflight" through straits is matched by President Nixon's preference for "free transit through international straits."[13] The Third World, however, does not generally accept the notion of free transit:

> (From the Colombo Declaration) While all delegations were in agreement that a strait used for international navigation should in times of peace remain free for the innocent passage of merchant ships of all countries, subject to rules and regulations of the riparian states, many delegations rejected both the "corridor of high seas" and "free transit" concepts.[14]

For a naval power, innocent passage is less satisfactory than free transit because on an innocent passage submarines must surface and no overflights are permitted. Some states, including the Soviet Union, maintain that innocent passage by warships is only permitted with notice. Thus, once again, the common maritime interests of the United States and the Soviet Union find them linked against the less powerful underdeveloped states.

Gorshkov calls the freedom of the high seas "the main legal instrument ensuring the regulation of the mutual relations between sovereign states whose interests come into contact with one another in the international waters of the World Ocean."[15] How does Soviet policy attempt to reconcile this freedom with the demands of the Third World for a new international maritime order? First, as seen above, the argument is made that the real challenge to maritime order is not a challenge from the underdeveloped states but from the "imperialist" states. This argument fails to properly account for the realities of the situation. Second, Gorshkov contends that Third World states are mistaken in promoting a revision of the law of the sea:

> There are also statements even against freedom of the high seas

on the ground that this principle is outmoded and is being used by the imperialists to the detriment of the interests of the developing countries. Our position on this question is very clear. The imperialists' violation of the legal norms attests not to the insufficient effectiveness of these norms, but rather to the strengthened aggressiveness of imperialism itself, which is stressed in the decisions of the 24th CPSU Congress. Therefore, it is not the norms themselves which must be changed, but first of all cooperation must be achieved between peace-loving forces in order to force the imperialist to strictly observe existing regulations.[16]

But existing regulations mean that modern fishing fleets, American, Japanese or Russian, can fish within the 200-mile limits which several Third World countries demand. Existing regulations mean that any nation can sail its naval fleets within close proximity to Third World coasts. Accordingly, many underdeveloped countries are insisting that existing regulations be changed. As the Latin American countries declared at Montevideo in 1970: "The right to establish the limits of their maritime sovereignty and jurisdiction in accordance with their geographical and geological characteristics and with the factors governing the existence of marine resources and the need for their rational utilization (is a basic principle of the Law of the Sea)."[17]

As an alternative to either maintaining the embattled traditional freedoms of the high sea or permitting national claims to carve the oceans into national lakes, the United States, among others, has proposed the establishment of an international ocean regime. The character of the American proposal was outlined in an important Presidential announcement in 1970:

Therefore, I am today proposing that all nations adopt as soon as possible a treaty under which they would renounce all national claims over the natural resources of the sea-bed beyond the point where the high seas reach a depth of 200 metres (218.8 yards), and would agree to regard these resources as the common heritage of mankind. The treaty should establish an international regime for the exploitation of sea-bed resources beyond this limit. The regime should provide for the collection of substantial mineral resources to be used for international community purposes, particularly economic assistance to developing countries. It should also establish general rules to prevent unreasonable interference with other uses of the ocean, to protect the ocean from pollution, to assure the integrity of the investment necessary for such exploitation and to provide for peaceful and compulsory settlement of disputes.[18]

The idea of an international regime has generally been endorsed by Third World states. For example, it received the support of the Third Conference of Heads of State or Government of Non-Aligned Countries in Lusaka in 1970:

... an international regime, including appropriate international machinery to give effect to its promises should be established by an international treaty. The regime should provide for the orderly development and rational management of the area and its resources and ensure the equitable sharing by the international community in the benefits derived therefrom. It should also make adequate provisions to minimize fluctuation of prices of land minerals and raw materials that may result from such activity.[19]

But Admiral Gorshkov feels that proposals for an international ocean regime are unwise:

> Several developing countries are steadily advancing the idea of developing a convention on the seabed regime and on creating an international organ with very extensive powers which would become, essentially, a supranational organ and would control all exploitation of the seabed conducted by different countries. It is quite evident that such an approach is not very realistic, since it actually envisions an institution of some sort of international consortium in which inevitably, due to the objective laws of the capitalists' market, the largest imperialist monopolies would play the major role. Therefore, regardless of the good intention of the authors of this idea, the power in it would belong to precisely those forces against whom the creation of such an organ is intended to protect.[20]

Thus, Soviet naval policy, as reflected in Admiral Gorshkov's article, appears unable to satisfactorily resolve the dilemma of supporting the freedoms of the high seas while satisfying the demands of the underdeveloped world for a greater share of ocean resources. Gorshkov's argument attempts the reconciliation by pretending that the real challenge to the traditional law of the sea is being mounted by the "imperialist" states. Seemingly, then, the Soviet Union can both support the traditional rules and take an anti-imperialist stand. But the facts belie the Gorshkov approach because the imperialist states are supporting, not attacking, the traditional rules. It is in American interests, as it is in Soviet interests, to keep territorial waters narrow and permit free transit through straits. In this fashion we both protect the maneuverability of our naval fleets and leave the oceans open to our economic use. The challenge to traditional rules of international sea law comes from the underdeveloped states which; naturally, prefer to protect a share of ocean resources through the exercise of sovereignty because they do not have the technological wherewithal to exploit them in an ocean free-for-all and which stand to gain little from greater mobility for great power navies.

In defending the existing maritime system, the Soviet Union finds itself in a theoretical predicament. The Russians are now aligned with the "imperialist" powers, resisting the attempt of the Third World to rewrite ocean law in favor of developing states. The United States has moved somewhat over toward the demands of the Third World by offering to trade an international regime with control and/or proceeds from ocean exploitation for narrow territorial seas and free transit through straits. Fearing that an international regime would be in the control of the "imperialists" or, perhaps, because actual control might lie with the developing states, the Soviet position, as stated by Gorshkov, is to oppose a powerful international ocean regime. Instead, the Soviet Union insists that "existing regulations" should be more conscientiously obeyed. But an international regime which would donate proceeds to the

BIOGRAPHIC SUMMARY

Lt. Mark W. Janis, USNR, did his undergraduate work in international relations at Princeton University and, as a Rhodes Scholar, earned an M.A., with Honours, in jurisprudence at Oxford University. Lieutenant Janis has been active in private law practice and since the summer of 1972 has served as an instructor in politics at the Naval Postgraduate School at Monterey, Calif.

needs of the developing states is more to the benefit of the Third World than an "improved" status quo because the underdeveloped states cannot hope to effectively compete with the exploiting technology of the developed states. Accordingly, the Third World supports either an extension of national jurisdiction or an international regime or some combination of the two. Neither alternative is fully acceptable to Admiral Gorshkov.

Ironically, then, Gorshkov finds himself in a more "conservative" position than the United States. While both superpowers favor maximum mobility for their fleets, the United States is willing to trade this mobility for an international regime. Gorshkov seems unwilling to accept the regime alternative. Despite Soviet protestations and frustrations, the Soviet Navy is committed to traditional freedoms of the high seas for reasons befitting a maritime power; it is little served by a radical change in the status quo. As a consequence, Admiral Gorshkov finds himself opposed to the demands of the Third World bloc, no matter how much he doth protest.

NOTES

1. S.G. Gorshkov, "Navies in War and Peace," *Morskoy Sbornik*, No. 2, 1973, pp. 13-25.
2. *Ibid.*, p. 13.
3. *Ibid.*
4. "Declaration of President of Chile Claiming Jurisdiction over Seas to a Distance of 200 Miles," 25 June 1947, in Norman J. Padelford, *Public Policy for the Seas* (Cambridge, Mass.: MIT Press, 1970), pp. 85-86.
5. United Nations, General Assembly, *Agreement (Declaration on the Maritime Zone) Between Chile, Ecuador and Peru, Signed at the First Conference on the Exploitation and Conservation of the Maritime Resources of the South Pacific, Santiago*, 18 August 1952 (A/AC 135/Rev. 1), 12 August 1968, pp. 11-12.
6. "United States Note of Protest to the Government of Chile," 2 July 1948, Padelford, p. 87.
7. Gorshkov, p. 15.
8. *Ibid.*, p. 14.
9. United Nations, General Assembly, *Asian-African Legal Consultative Committee, Twelfth Session, Colombo, Report of the Sub-Committee on the Law of the Sea*, 18-27 January 1971 (A/AC 138/34), 30 April 1971, p. 7.
10. "Conclusions in the General Report of the African States Regional Seminar on the Law of the Sea, Held in Yaoundé," 20-30 June 1972, *International Legal Materials*, vol. XII, No. 1, p. 210.
11. Gorshkov, p. 16.
12. *Ibid.*, p. 17.
13. United Nations, General Assembly, R.M. Nixon, *Announcement on United States Oceans Policy*, 23 May 1970 (A/AC 138/22), 25 May 1970, p. 4.
14. United Nations, General Assembly, Colombo, p. 13.
15. Gorshkov, p. 14.
16. *Ibid.*, p. 16.
17. United Nations, General Assembly, *Montevideo Declaration on the Law of the Sea*, 8 May 1970 (A/AC 138/34), 30 April 1971, p. 3.
18. United Nations, General Assembly, Nixon, p. 2.
19. United Nations, General Assembly, *Lusaka Declaration of Peace, Independence, Development, Co-operation and Democratization of International Relations and Resolutions of the Third Conference of Heads of State or Government of Non-Aligned Countries*, 8-10 September 1970 (A/AC 138/34), 30 April 1971, p. 5.
20. Gorshkov, p. 16.

Perhaps the most important issues to be addressed in this summer's international conference on the law of the sea are those concerned with the breadth and jurisdiction over the resources of the adjacent seas. A major compromise between those states in favor of the unilateral right to extend territorial jurisdiction and those who wish to retain the status quo is expected in the form of "patrimonial seas"--an area extending 200 miles over which a state may regulate the exploitation of economic resources, but over which she must guarantee the traditional rights of free passage. Only through cooperation and compromise can the participating states hope to eliminate the anarchy and injustice characteristic of the present system.

AN INTER-AMERICAN APPROACH TO THE LAW OF THE SEA?

An article prepared

by

Professor Charles L. Cochran

Nineteen seventy-four promises to be a momentous year in the development of the law of the sea. A comprehensive conference will meet in Caracas, Venezuela, this summer to elaborate a new and equitable international legal system for the sea, the seabed, and the ocean floor as well as the subsoil beyond the limits of national jurisdiction. A host of related issues will be considered, including precise definitions of the areas and the problems concerning the regime of the high seas, the Continental Shelf, the territorial sea and contiguous zone, as well as fishing and conservation of the living resources of the seas, the prevention of pollution, and issues concerning scientific research.

Preparation for the conference began in the United Nations in late 1970 and continued in other regional organizations during 1971. The importance attached to the work of the preparatory committee is reflected in the number of states in the General Assembly which sought appointments to the committee. Ultimately, 91 states of the General Assembly were appointed as members, and at least 19 other states have participated as observers. With so many members in the preparatory committee, agreement was not easily reached. In an

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effort to facilitate its work, the committee was divided into three subcommittees. The first is the Seabed Subcommittee whose focal point is the regime of law dealing with economic resources found on the seabed and subsoil of the Continental Shelf to the limits of national jurisdiction.

The second subcommittee deals with the classical themes of the law of the sea, such as the determination of maritime space and questions concerning the breadth of the territorial sea.

The third subcommittee is designed to deal with the preservation of the marine environment. Its areas of concern include the prevention of pollution, the problems associated with scientific research, and the preparation of draft treaty articles on those problems. It has been particularly concerned with determining state responsibility in preventing the contamination of the seabed.

A majority of states were in agreement that the subcommittee system should prevail for the focusing of points of law and breaking them down to more manageable proportions. This preparatory subcommittee work revealed that states differed significantly on the issues involved, and the approaches taken were largely a reflection of a leader's perceptions of states' present and anticipated national interests. The approaches generally fall into the following categories. First, some countries favor the status quo, are generally opposed to new regulations that would give coastal states either preferential treatment or extended jurisdictions, and feel that most of the ocean should be left open to the free use of all nations. Beyond the narrow limits of the territorial sea, emphasis is placed on the concept that the seas are a common heritage and resource of all mankind; no individual or group of states may claim a special right or interest to benefit from the seas and the resources therein unless the community of states sanctions the claim.

This group is led principally by the Soviet Union, Japan, the United Kingdom, and a few other states with major distant-water fishing interests.[1] These developed states are joined in their opposition to the extensive claims of some coastal states by a large number of the world's landlocked and shelflocked states.[2] A large percentage of the landlocked countries are undeveloped and would have much to gain from either free access to the sea's resources or a broad international jurisdiction over the sea giving equal access to all states.

In opposition to the proposition of this first group are states which view the right of coastal states to extend their jurisdiction seaward either unilaterally or through international agreement. The claim of such coastal state prerogatives is a relatively recent phenomenon and represents a crude measure of the states' accessibility to the seas as well as their dependence on the resources in the seas and on the seabed. Representatives of this group are coastal states with considerable investment or dependence on ocean resources such as Brazil, Ecuador, and Peru.

The third position represents a compromise and had its origin with the "Specialized Conference of Caribbean Countries Concerning the Problems of the Sea," a group that formulated the Santo Domingo Declaration. Fifteen nations met and established principles[3] based on a need for the development of regulations which would take into account scientific and technological progress as well as new political realities that did not exist when many of the classical rules were formulated. The declaration noted that the rights, obligations, and responsibilities of states relative to the various oceanic zones should be defined through norms of worldwide application without prejudice to regional or subregional agreements based on those norms. New rules on the oceanic zones should be designed to promote international cooperation for the protection and har-

vest of marine resources. In formulating these rules it is essential that both the needs and interests of individual states as well as those of the international community be met.

The Declaration of Santo Domingo is made up of two inseparable elements. The first element concerns the territorial sea in the classical sense. The sovereignty of the state is recognized as extending beyond its land territory over an area of the sea adjacent to its coast to a limit of 12 nautical miles, measured from the appropriate baseline. The sovereignty of the coastal state also extends to the superjacent airspace as well as to the seabed and subsoil beneath the territorial sea. Ships of all states maintain the right of innocent passage through the territorial sea.

The declaration recognized a consensus in support of a 12 nautical mile territorial sea and concluded that an international agreement should establish a legal norm. In the absence of a legal standard, several states in the world community have made claims beyond the 12 miles granted in the 1958 Convention on the Territorial Sea and the Contiguous Zone,[4] even though they recognize that they can exercise only limited jurisdiction over such areas.

The contiguous zone in which the coastal state may exercise authority regarding customs, fiscal, immigration, or sanitary regulations up to 12 miles from its coast is practically a dead issue, and nearly all states have now added the claim for exclusive fishing rights at least to the outer limits of the contiguous zone. This leaves only the right of high seas navigation, which is a bit broader than rights of innocent passage through a territorial sea, and scientific exploration in the contiguous zone beyond the territorial sea intact. Most states have decided to resolve the situation by claiming the maximum allowed under the 1958 convention.[5]

It is significant that the draft articles proposed by the United States on the Breadth of the Territorial Sea, Straits, and Fisheries submitted to subcommittee II suggest the right of each state to establish the width of its territorial sea up to 12 nautical miles. This right would be limited only by the provisions of article II which state that,

> In straits used for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a foreign State, all ships and aircraft in transit shall enjoy the same freedom of navigation and overflight, for the purpose of transit through and over such straits, as they have on the high seas.[6]

The new position on the territorial sea is inseparable from the concept that there is a regime beyond the limits of the coastal states' sovereignty which is still not commonly shared by all states. This area in which the coastal state could exercise certain kinds of specialized jurisdiction over the economic resources was termed the "patrimonial sea." The Santo Domingo Declaration proposed that the whole of the area including the territorial sea and the patrimonial sea should not generally exceed a maximum of 200 nautical miles. Differences regarding the width of the zone and the powers of the coastal state are less important than the recognition of the principle itself. This is the zone which the forthcoming conference must determine and define. It represents one of the most important developments in recent years and provides the most promising basis of a compromise formula.

The concept that the coastal state bears the responsibility for the prudent use of coastal resources is a consequence of the philosophy of developing countries. The primary motive for coastal states aspiring to such a right has been justified by Mexico and an increasing number of states as being nothing less than the close interrelationship between

land and sea in the environment. Other states see the need for the establishment of a "buffer zone" to protect against pollution. It is also argued that there is an element of natural justice involved in the concept of the patrimonial sea. The living resources are fished by all, often to the detriment of those closest by. Developing countries are more desperately in need of creating a plentiful protein supply for their frequently undernourished and expanding populations. The utilization of the sea's resources also provides employment opportunities in these same countries.

At the same time, it is important to note that this is not an exercise in sovereignty. The Santo Domingo Declaration provides a basis for states to exercise rights over resources rather than over the area itself. Navigational rights are not affected as article 8 states that in the patrimonial sea, ships and aircraft from all states, whether coastal or not, should enjoy the right of "freedom of navigation and overflight with no restrictions."

The coastal state has no power to shut off the patrimonial sea from navigation, and while the patrimonial sea concept would allocate resource management functions over all living and nonliving resources on the seabeds, the subsoil, and the vertical water column to a distance of 200 miles seaward of the coastal state, the exact distance could be compromised. For example, Iceland recently claimed exclusive fishing rights within 50 nautical miles of its coast. That distance was used rather than 20 miles or 200 miles because 50 miles is roughly the edge of the Continental Shelf surrounding Iceland. Beyond that limit there is no great abundance of fish. There can, however, be no doubt that coastal states will be enabled to restrict fishing and other forms of economic exploitation in the waters adjacent to their coasts at distances greater than 12 miles. The same is true in terms of a coastal state's exclusive right to exploit the resources in the adjacent seabed to a like distance.

A case in point is a recent U.S. agreement with Brazil concerning shrimp fishing by American vessels off the Brazilian coast.[7] Brazil claimed a territorial sea of 200 nautical miles from its coast largely on the pragmatic political grounds that foreign fishing vessels with advanced technical equipment were fishing out certain fish and crustaceans, primarily shrimp, and were taking them back to their own countries. Not only was Brazil deriving no benefit from the exploitation of the fishing grounds, but her stocks were being depleted. The situation was seen by Brazil as being patently unfair. Brazil, anticipating that it would be criticized if it substituted foreign exploitation for coastal state exploitation, indicated instead its concern for conservation and agreed that foreign vessels could fish in those waters only after having obtained a license to fish up to a maximum limit of not more than 160 vessels flying the U.S. flag at any one time. There are other restrictions on the type of gear to be used and a prohibition against the use of electronic equipment for fishing purposes.

The United States has now established its own "conservation" areas in the Northeastern Pacific Ocean and has signed an agreement with the Soviet Union limiting the right of the Soviets to fish in an additional 9 mile area adjacent to but outside of the 12 nautical mile exclusive fishery claim by the United States.[8] While the U.S. position is rather modest compared to claims of a 200-mile patrimonial sea, it is indicative of a positive attitude toward the idea of the patrimonial sea.

The United States has also proposed an alternative to the patrimonial sea economic zone in the form of the "species" approach. The species approach differentiates between three kinds of fish, each requiring different regulations—those that migrate widely

over great distances, those that spawn in fresh or estuarine waters and then return to the sea, and fish that remain off the coast of a particular state. The major questions to be resolved by the conference are: Which approach to the resolution of the problem of the management and distribution of living marine resources will most effectively do the job and win the support of most states of the world? An economic zone recognized in the concept of the patrimonial sea certainly is less complicated, does not require agreements on each species, and enjoys the general support of many more states than does the species approach.

Although the problem is not addressed directly, the Santo Domingo Declaration and the patrimonial concept would still permit a solution to the fisheries problem in the economic zone by taking into account the migratory habits of fish and the manner in which they were fished. The declaration did not attempt to define procedures for the settlement of disputes and left open distinctions in the treatment of living resources based on their migratory habits. Therefore, the document provides a valuable starting point for serious negotiations and is in conformity with the idea.

In June 1972, within weeks of the meeting at Santo Domingo, a regional seminar of African States was held in Yaoundé (Cameroon) to discuss similar issues. At its conclusion the seminar adopted several recommendations that closely paralleled those of the Santo Domingo Declaration.[9] It noted that the territorial sea should not extend beyond a limit of 12 nautical miles, but further recommended that the African States extend their sovereignty over all the resources of the high sea adjacent to their territorial sea "within an economic zone to be established and which will include at least the continental shelf."

The purpose of the economic zone over which the coastal state would have exclusive jurisdiction is to provide for regulation and national exploitation of the living resources of the sea, their reservation for the primary benefit of coastal peoples and economies, and for the control of pollution in the area. The general report was adopted unanimously without reservation.

The waters of the seas situated beyond the limits of the patrimonial sea or economic zone constitute an international area of the high seas and seabed in which traditional freedoms remain. However, in the interest of protecting the marine environment and promoting scientific research and conservation, the area should be subject to international regulation of worldwide authority. The Yaoundé report adds that the governing body set up to manage the common heritage outside the limit of national jurisdiction should operate in such a way that the developing countries would be the primary controllers and beneficiaries.

By 1952, considerable juridical support had developed for claims of "sovereignty" over the sea adjacent to states up to a distance of 200 nautical miles. Chile, which had extended its territorial waters claim to 200 miles in 1946, invited Ecuador and Peru to meet in Santiago where they concluded the Declaration of Santiago on the Maritime Zone.[10] The declaration recognized 200-mile claims of the three states, and 2 years later a subsequent agreement was signed by these states which bound them not to diminish the 200-mile limit without prior consultation and agreement with the other signatories.

The patrimonial sea concept appears to be the most viable method for compromise by which these states could still claim 200 miles, even if only for exclusive exploitation rights and not as a territorial sea beyond 12 miles. There is now general agreement that coastal states do have a legitimate claim for preferences on the high seas beyond the limit of the territorial sea.

The Inter-American Juridical Committee met in Rio de Janeiro in January and February of 1972 and appeared to sanction the Declaration of Santo Domingo in its report.[11] The Juridical Committee recommended that the American States take the report into consideration when presenting their recommendations to worldwide conferences discussing a new legal system for the seas. Unfortunately the Juridical Committee's statement was unclear in its definitions of "sovereignty" and "jurisdiction." Article one states that

> The sovereignty or jurisdiction of a coastal state extends beyond its territory and its internal waters to an area of the sea adjacent to its coasts up to a maximum distance of 200 nautical miles, as well as to the air space above and the bed and subsoil of that sea.

Two zones of the sea within the 200-mile limit are distinguished. The first zone extends to a distance of 12 nautical miles and is dealt with in terms that leave no doubt that it is the territorial sea. The second zone is treated as the patrimonial sea but it is not clear that a coastal state's "jurisdiction" rather than "sovereignty" is exercised in this area. This failure is important since there remains the possibility that a state could subsequently enlarge its claims over an economic zone in the name of "sovereignty" over the area. If this becomes the case, an "innocent passage" agreement will be much more difficult to achieve.

Caracas, during the summer of 1974, will witness a comprehensive effort to thrash out an agreement on the law of the sea. The issues of the economic partition of the sea and the classical themes of the determination of maritime space and the more recently recognized problems of contamination and scientific exploration are so inextricably bound together that no one area of problems can be resolved without requiring accommodation in the other areas. Therefore, if serious negotiations are to go forward, a willingness to compromise is essential. Failure to reach a settlement would seriously jeopardize any hope of uniform rules concerning the law of the sea. Indeed, the consequences of failure to reach an agreement and the resulting anarchy are perhaps the greatest incentive to bargaining in good faith.

The proposal put forward at Santo Domingo in June of 1972 provides a sound basis for a compromise solution. Nothing in the concept of the patrimonial sea would prevent the maintenance of "free passage" as opposed to "innocent passage" in the straits that would otherwise become part of the territorial sea if a uniform 12-mile limit was established. This would satisfy the major maritime states' concern for freedom of movement upon the seas. The patrimonial sea, between 12 and 200 miles, in which the coastal state would exercise rights over the resources rather than sovereignty over the area, would ensure that the navigational rights of other states would not be affected. Such an agreement would prevent a creeping extension of restrictive claims and offer states having made claims of a 200-mile territorial sea an acceptable compromise. Several states claiming a 200-mile

BIOGRAPHIC SUMMARY

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territorial sea have already indicated that they intend to enforce only their economic claims in the area.

In this system it would be possible for the coastal state either to adopt the measures necessary to prevent or reduce pollution within this zone unilaterally, the zone being a part of its national resources, or the state could refer to a broader set of international standards. Scientific research could also be carried out in this area with the coastal state having a right to receive all results of such research activities. The coastal state would be required to give its permission to allow the scientific research activities without unjustified discrimination or restriction.

These proposals leave open the question as to whether the seas and the ocean floor located beyond the patrimonial sea, as well as the resources beyond that limit, are the common heritage of mankind or whether that area should be governed by a new international organization. An international organization could grant licenses for economic exploitation with the licensing revenues being turned over to an international development fund as well as enforce pollution controls in that area. A major point in favor of the "international organization" approach as opposed to the "common heritage" approach is the realization that "freedom of the seas" has come to mean freedom to pollute and overfish. The old anarchy must be replaced by progressive laws regulating the use of the seas.

NOTES

1. Other states with major distant-water fishing interests include the United States, East and West Germany, Poland, South Africa, South Korea, and the People's Republic of China. The United States and the People's Republic of China are major exceptions in not supporting the position of this group.

2. "Shelf-locked" is defined here to indicate a nation whose continental shelf abuts that of a neighbor so that no portion of the shelf descends below the 200-meter isobath, which is the legally defined limit.

3. Barbados, El Salvador, Guyana, Jamaica, and Panama did not sign the Santo Domingo Declaration. It was signed by Colombia, Costa Rica, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Dominican Republic, Trinidad and Tobago, and Venezuela.

4. United Nations Conference on the Law of the Sea, Geneva, 1958, *Convention on the Territorial Sea and the Contiguous Zone*, A/CONF.13/L.52 (Geneva: 1958).

5. Fifty-four states now claim 12 miles and 23 claim more than 12. Of 41 states who claim less than 12 miles for a territorial sea, 25 claim at least 12 miles for exclusive fishing rights.

6. United Nations, General Assembly, "Draft Articles on the Breadth of the Territorial Sea, Straits, and Fisheries Submitted to Sub-Committee II by the United States of America" (A/AC.138/SC.II/L.4), *Official Records; Report of the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction*, 26th Session, Supplement No. 21 (A/8421) (New York: 1971), p. 241. The United States recognizes in its submission the inevitability of the 12-mile territorial sea, but, as a major maritime nation, is concerned that these expanded claims could impede navigation and commerce, and decrease the mobility of military vessels. Article I of the draft articles proposed by the Union of Soviet Socialist Republics concerning straits used for international navigation has almost identical language. See United Nations, General Assembly, "Draft Articles on Straits Used for International Navigation Submitted by the Union of Soviet Socialist Republics" (A/AC.138/SC.II/L.7), *Official Records; Report of the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction*, 27th Session, Supplement No. 21 (A/8721) (New York: 1972), p. 162-163. Both states would recognize the right of coastal states to designate corridors for transit by both ships and aircraft in these areas.

7. "Agreement Between Government of Federative Republic of Brazil and Government of USA Concerning Shrimp," *Lawyer of the Americas*, v. 5, no. 1, Feb. 1973, p. 188-197.

8. U.S. Treaties, etc., "Fishing Operations, Northeastern Pacific Ocean"; "Fisheries, Northeastern Part of the Pacific Ocean off the United States Coast," *Treaties and Other International Acts*, Series 7572 and 7577 (Washington: U.S. Govt. Print. Off., 1973).

9. United Nations, General Assembly, Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction, *Conclusions in the General Report of the African States Regional Seminar on the Law of the Sea, Held in Yaoundé, from 20-30 Jun 1972*, A/AC.138/79 (New York: 1972).

10. Marjorie M. Whiteman, *Digest of International Law* (Washington: U.S. Dept. of State, 1965), v. IV, p. 1089-1090.

11. Organization of American States, General Secretariat, *Work Accomplished by the Inter-American Juridical Committee during Its Regular Meeting Held from January 15 to February 16, 1973*, OEA/Ser.Q/IV.6 CJI-13 (Washington: 1973).

Ψ

They have no lawyers among them for they consider them as a sort of people whose profession it is to disguise matters.

Thomas More: Utopia (Of Law and Magistrates), 1516

THE THIRD INTERNATIONAL SEAPOWER SYMPOSIUM—A SUMMARY REPORT

The Third International Seapower Symposium convened at the Naval War College for the week of 15-19 October 1973. Thirty-nine countries sent senior representatives, including six attaches and eighteen CNO equivalents;* they were joined by Admiral Zumwalt for the full week. Nine navies sent their Naval War College director as a second delegate. Because of the theme chosen, internaval cooperation with emphasis on nonmilitary use of naval forces, the U.S. Coast Guard played an active role. Two flag officers represented the Commandant, and five other officers provided Coast Guard insights to the Regional Committees.

This series of Seapower Symposia was inaugurated at the Naval War College in November 1969, when 37 countries and 14 CNO's met to discuss a theme centered on challenges to maritime power, freedom of the seas, economic interpendence, and the maritime future. The Second Symposium took place in November of 1971 and was attended by 42 countries and 19 CNO's who focused on a concept for a Free World Frigate and on maritime cooperation. By the conclusion of the Second Symposium there was a consensus that these international meetings should continue on a biennial basis with the various regional groupings of the membership convening in Regional Symposia during the intervening years.

As a consequence, Regional Symposia were held in Venice in October 1972, and in The Hague during April 1973. The Venice Symposia addressed the civilian aspects of maritime power and stressed cooperative efforts for the resolution of mutual problems. Subse-

*See Appendix A for country listing.

quently, five working groups were identified. Of these, three have become active discussion and liaison groups designed to improve regional cooperation in the areas of communications, search and rescue, and pollution control. The Hague Regional Symposium centered on the technical aspects of manmade obstructions to navigation (offshore artificial islands), environmental control, and the interrelationship between the merchant marine and the navy.

Because of this high degree of emphasis in the two Regional Symposia on the nonmilitary aspects of maritime power, the theme for the Third International Symposium was designed to examine the nonmilitary use of naval forces with emphasis on feasible projects for internaval and international cooperation. By way of background for the Symposium discussions, Naval War College faculty members developed a study paper which examined the existing international law in such areas as freedom of navigation, piracy, hijacking, civic actions, safety of life at sea, international treaty enforcement, maritime crime, and marine environmental protection.

This background paper summarized the existing international law, pointed out possible restraints or inhibitions which may arise from changes to the law, and suggested areas of cooperation to help resolve current problems or reduce costs. It was recognized that all navies have certain functions in common. In an era of restrictive manpower and reduced national military budgets, programs of mutual cooperation could result in savings which each country could then apply to other hardware or personnel purposes. Prior to the Third Symposium, this background report was mailed to all participants.

Each country invited was asked to contribute brief papers on leadership innovations in its navy, the role of the navy in its contemporary society, and to suggest areas for naval cooperation. Primarily, these papers were intended to be used as supplemental information on actions being taken in various countries to come to grips with crucial problems of leadership and the justification for the continuing existence of a navy in today's world. The need to inform the public of the naval role and maritime mission has been identified as a crucial problem during all three Symposia.

Understandably, the emphasis on nonmilitary use of naval forces led to a full participation by the U.S. Coast Guard whose role was to develop the fine line between purely naval functions and those which could be performed by a navy or Coast Guard. Since many of the participating navies must perform Coast Guard-type functions, participation by our own Coast Guard proved highly beneficial.

The Symposium committees were organized so that each could discuss the problems of a specific region; South America, Northern Europe, the Mediterranean, Western Pacific, and the Indian Ocean areas. These committees, basing their work on the Symposium presentations of major speakers, sought to identify regional problems amenable to solution by internaval cooperation.*

A sixth committee made up primarily of directors of Naval War Colleges examined these problems and cooperative programs to determine their feasibility and interregional applicability. This method was chosen in the belief that the Naval War Colleges could and should serve as action offices to provide continuity and impetus to the various cooperative projects undertaken. Since almost all of the participating nations have Naval War Colleges of their own and have an officer enrolled in our Naval War College, the war college forum seemed to be an excellent medium to ensure the viability of the Symposium's attainments.

*See Appendix B.

Major speakers included the Chief of Naval Operations who, as host, provided the keynote address and reviewed the present international maritime balance; Vice Admiral Benjamin F. Engle, U.S. Coast Guard, who outlined the roles and functions of a Coast Guard-type force with emphasis on the organization of our own U.S. Coast Guard; Vice Admiral William W. Behrens, U.S. Navy, from the National Oceanic and Atmospheric Administration, who provided a survey of the environmental and ecologic aspects of the oceanic world; Captain Joseph D'Emidio, U.S. Navy, from the Environmental Protection Division of the office of the Chief of Naval Operations, who discussed the existing laws and status of ecological and pollution control and Mr. Joseph Kasputys, Director of Policy and Plans from the Maritime Administration who discussed the evolving role of the merchant marine as a determinant of seapower. During an evening event, the Under Secretary of the Navy, Mr. J. William Middendorf, analyzed the imperatives for increased international maritime cooperation. On the fifth and final day, each committee provided a summary of its work and conclusions, observations or recommendations.

Overall, it was evident that there is a considerable amount of mutual benefit to be found in navy-to-navy cooperation and that similar Symposia should be continued as an ideal forum for CNO's and other senior key naval officials to meet face-to-face. In view of these two points it was agreed that the Fourth Symposia would be held in Newport in 1975 and that regional sessions should meet during the intervening years.

While the results of the Symposium's efforts are summarized below, certain highlights may be of particular interest and worth separate comment.*

A series of presentations were given by the Philippines, Bolivia, Argentina, and Indonesia outlining justification for the future existence of navies. It was of interest to note that personnel problems common to large navies—leadership, human relations, attractiveness of naval service for at least one term let alone a career, and apportionment of adequate funds to personnel programs—are problems common to all navies. There was general recognition that the forthcoming law of the sea working sessions would point to territorial sea limits greater than 12 miles. This, in turn, may result in restraints on freedom of navigation which will be further compounded by ecological and pollution control restrictions; nations may find it costly and operationally inhibitive to maritime operations.

One interesting sidelight to this territorial seas issue was the thought that a series of different regional limits may well become the interim solution for the next decade. Countries with continental shelves would tend to proclaim narrower limits than those maritime nations who lack such shelves. One delegate put it *neatly*—"In justice, we must have enough water in which to catch fish or mine the bottom in order to equate to the value of your offshore oil production."

There seemed to be a consensus that Coast Guard type functions were more palatable in the public eye and that navies would have to accept these and other maritime functions such as oceanographic research, simply in order to acquire funds, manpower, and ships to keep alive. There was concern that the merchant marine may outstrip technologically research developments that navies hold dear and that the merchant marine could well be a serious competitor for personnel, ships, and money. Concern was also expressed that merchant marines are becoming increasingly more technically oriented and less professionally qualified as supertankers and huge cargo ships come more onto the scene. The risk of disaster increases

*See Appendix C.

amongst ships poorly manned and ill-equipped to provide damage control. As a consequence, more and more effort needs to be devoted to traffic control in vital waterways such as the English Channel, major port areas, and international straits. There was no question that the coastal collision of two supertankers would be both an ecological and strategic disaster since the sheer bulk of the cargo makes it strategically significant to a national economy, as well as a pollutant beyond the control of many coastal states. Yet there is little agreement on traffic control measures or the idea of a modest international budget to share the costs of vital navigation aids and control centers.

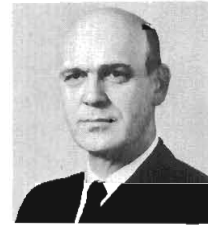
High interest was evident in better methods and cooperation in the area of search and rescue and towards the reporting and control of oceanic pollutants and contamination. While the sources of these problems are not usually naval in origin, it is likely that the solutions of these matters will fall to the navies, the best equipped and most readily available force.

The Special Study Group comprised of war college directors identified the teaching of ocean management as a major concern of all naval war colleges. There was a general feeling that navies have been late in coming to a full appreciation of the importance of ocean management. Having belatedly recognized its significance, they now have much to do to ensure that they obtained a corps of technically competent officers to fulfill ocean management functions and to serve as advisors to key decision makers. Ocean management was defined as "the judicious use of the oceans and their resources, the surface, the water column, the seabed and subsoil, within a legal framework, while maintaining the integrity of the environment in attempting to meet man's needs and desires."

There was a widespread feeling that two of the most productive areas of internaval cooperation continue to be the exchange of personnel and publications, and a greater frequency of at-sea, internaval training exercises. Surprisingly, there was also strong feeling that an unclassified and basic series of publications for internaval cooperation should be developed. The goal is to produce practical tactical doctrine and operating procedures below the sophistication level of the ATP's and for more widespread use. Such publications could be invaluable in times of search and rescue or other humanitarian operations, and could be useful in encouraging internavy training operations at sea. Hopefully, the Regional Symposia to be convened in 1974 will consider this question.

The final report of the Third International Seapower Symposium was published in January and distributed to all participants and CNO's. It contains a summary of the daily committee deliberations and, in a separate volume, reprints of all the major addresses. A limited number of spare copies are available from the Naval War College (Code 22).

BIOGRAPHIC SUMMARY



Captain Fiske is a member of the staff and faculty of the Naval War College. He participated in the first two International Seapower Symposia and served as Director for the Third Symposium. He has an extensive background in polar operations, naval aviation, logistics and joint planning, which he teaches in the Naval Staff Course, and is presently serving as the Permanent Coordinating Secretariat for the Conference of the Naval War Colleges of the Americas and as International Conferences Coordinator.

APPENDIX A

COUNTRIES PARTICIPATING

Argentina
Australia
Belgium
Bolivia
Brazil
Canada
China
Colombia
Denmark
Ecuador
Ethiopia
Finland
France
Germany
Greece
Guatemala
Haiti
India
Indonesia
Iran
Ireland
Italy
Italy (COMNAVSOUTH)
Japan
Korea
Lebanon
Netherlands
New Zealand
Norway
Philippines
Spain
Sweden
Thailand
Tunisia
Turkey
United Kingdom
Uruguay
Venezuela
Vietnam

OTHER PARTICIPANTS

Commander in Chief South (Naples)
Commander Naval Forces South (Naples)
Commander in Chief Atlantic (Norfolk)
U.S. Coast Guard
Maritime Administration
National Oceanic and Atmospheric Administration
Office of the Chief of Naval Operations
Attaches

APPENDIX B

SUMMARY OF PRINCIPAL COMMENTS, PROPOSALS AND RECOMMENDATIONS FOR AREAS OF NAVY-TO-NAVY COOPERATION

Eastern Paeific, Caribbean and South Atlantie Committee

. . . political support is fundamental . . . cooperative efforts among navies of the western hemisphere should be limited to area where common agreement exists on a particular problem

. . . there is a need to develop more effective coordination for search and rescue procedures . . . recommend explore feasibility of formalizing SAR procedure to ensure maximum joint use of existing assets for optimal effectiveness

. . . translate the full curriculum of the USCG four-week national SAR School and make available as a package course

. . . exchange meteorological, hydrographic and oceanographic technical personnel and training courses

. . . the Inter-American Defense Board and Inter-American Naval Conference are the vehicles to consider and adopt coordinated procedures, plans and policies with respect to military forces of this region

Western Pacific Committee

. . . a growing need for this region to investigate the concept of developing a small but effective multipurpose vessel. The Free World frigate concept remains valid.

Indian Ocean Committee

. . . proposes as an initial cooperative step the establishment of subregional Indian Ocean littoral groups to discuss solutions of mutual problems leading to a semipermanent regional symposium to meet periodically

. . . the U.S. Navy should take the initiative in the Western Pacific to arrange for multinational naval exercises not necessarily restricted to countries bound by alliance

. . . some form of regional organization with international ties to provide coordinated SAR in the area for merchantmen, fishermen, and pleasure craft

. . . visits between senior naval officers should continue and resolution of navy-to-navy arrangements should be at regional heads of navies meetings

. . . highly recommends publication of little known local distress signals, navigation practices, etc., in international pilot publications

Mediterranean and Eastern Atlantic Committee

. . . recommend division of the Mediterranean Sea into zones of responsibility for pollution control and coordinated, uniform SAR . . . strongly recommend establish national coordination centers with improved tracking and rescue vectoring capabilities

. . . expeditious development of pollution and SAR zones of responsibility in the Mediterranean would provide a model for improvement in national cooperation

. . . a uniform set of appropriate naval operating procedures is essential followed by multilateral exercises using these procedures

APPENDIX C

SUGGESTIONS PROPOSED BY TWO OR MORE REGIONAL COMMITTEES

. . . the rapid increase in financial costs of maintaining sea forces is a major problem confronting all nations

. . . establish necessary actions to monitor the marine environment . . . and diminish pollution by oil spills and dumping of inorganic pollutants by naval units and naval industrial sites

. . . exchange technical information on marine pollution abatement techniques . . . and environmental control technology

. . . control pollution in naval areas of mutual concern

. . . review ship design to diminish the risk of accidental or deliberate pollution

. . . contribute to regulations for pollution control

. . . increase opportunities for at-sea and shore training exercises to include multinational exercises

. . . increase the exchange of training, technical, operational and logistic publication among navies as well as personnel at various education levels and training facilities

. . . governments of maritime nations should be acquainted with the difficulties that could arise from a shipjacking incident

. . . mine warfare exercises are needed and greater exchange of information on mine and minefield characteristics both in the open sea and riverine so as to maintain the state of the art in mine clearance

. . . cooperation is easier within alliance structure but cooperative programs and information should be shared with non-alliance regional neighboring navies . . . training functions are the most productive areas for cooperative consideration

. . . there is a need for a common simplified tactical publication modelled on the ATP's but taking into account the specific needs of a regional oceanic area and including items of mutual concern such as safety at sea and SAR . . . these and other operating procedures do not require the sophistication of current NATO practices

. . . international support is needed for a forum similar to IMCO in which to examine maritime questions such as equipment standardization (e.g., submarine rescue hatches), regulatory standards, and communications

. . . naval war colleges should teach ocean management and the role of the navy in ocean management . . . war colleges should distribute and exchange ocean management information and faculty . . . Communist Bloc countries should be included . . . naval officers must be better prepared to understand the ocean environment as a system so they can cope with the changing maritime strategic situation and noncombatant use of naval forces

. . . future International Seapower Symposia should convene every two years . . . specific problems developed might well be tasked to regional symposia meeting in the intervening years . . . the results of regional symposia solutions or recommendations should be presented to the subsequent International Symposium

Ψ

With the inception of the zero draft, the Armed Forces of the United States, and particularly the Navy, must face the problem of how to recruit the skilled individuals able to meet their highly technical demands. Furthermore, if this all-volunteer force is to remain a more or less accurate cross section of the Nation's population, its racial makeup must also be taken into consideration. Retraining for those non-Caucasians already in the Navy as well as selective recruitment offers Navy recruiting strategists an opportunity to solve both the problems of racial balance and technical ability. Recruitment along racial lines has been used by other agencies with varied success, nevertheless, if the Navy wishes to remain as a viable career alternate to a large segment of the Nation's population, some such system must be attempted.

NON-CAUCASIAN RECRUITING AND THE OCCUPATIONAL STRUCTURE OF THE NAVY

An article prepared
by
Professor Roger D. Little
and
Professor Raymond F. Turner

The inception of the all-volunteer armed force has placed the military service in competition with civilian employers for the available portion of the Nation's work force. While there are indications that the elimination of the draft has not severely hampered the services in meeting their immediate manpower needs, fears have been expressed that in time the racial composition of the services will deviate substantially from that of the civilian population.[1] Some studies have gone so far as to suggest the eventuality of predominately black enlisted ranks, although the Gates Commission Report did not agree with this prospect.[2] Even if this did occur over the long term, the Navy's immediate problem is one of attracting and retaining non-Caucasians.

The solution to the problem of how to employ an adequate racial cross section of the population may well be found by upgrading the occupational opportunities available to minorities in the Navy. The implementation of a three-phase process may be a useful approach to this problem. First, those Navy occupational specialties where comparative shortages of non-Caucasian personnel presently exist must be identified. Second, the Navy should strive to improve the occupational opportunities of those non-Caucasians already in the Navy by providing a more rapid rate of upward occupational mobility. Third, concentrations of non-Caucasian manpower who possess the needed skills and who might be recruited must be located. These solutions all require the determination of the occupational distribution of the Navy in such a way that a meaningful comparison can be made with existing data on the regional

occupational distribution of the civilian work force. The inclusion of such analysis in an overall strategy for Navy recruiting would, if successful, enable the service to achieve its minority recruiting goals while realizing substantial cost reductions. Additionally, a more balanced distribution of non-Caucasians in the various Navy ratings could be viewed by the prospective non-Caucasian recruit as prima facie evidence of equal opportunity. This could only expand the Navy's potential sources of manpower in the context of the all-volunteer armed force.

Minority Status in the Navy. Not only has the Navy traditionally employed a smaller percentage of non-Caucasians (Negroids, Mongoloids, American Indians, and Malaysians), both officer and enlisted, than have the other services,[3] but, as will be shown later, the non-Caucasians that have been enlisted are concentrated in the lower enlisted pay grades and less skilled occupations (which also may be lower paying).[4] Cultural differences have weighed heavily in the Navy's failure to attract non-Caucasian sailors, and the lack of a seagoing tradition among some non-Caucasian peoples, most notably the black African nations, has been one of the reasons most often cited. Additionally, the relatively inferior economic and social status of non-Caucasians in the United States has prevented them from gaining the background necessary for training in the more skilled jobs. Thus it might be observed that the United States has failed to produce a proportional number of sailors from among non-Caucasian groups for many of the same reasons that the Nation has also failed to produce but a few non-Caucasian tennis players, golfers, and swimmers of exceptional ability. The facilities that tend to develop these orientations and talents have simply not been available to many non-Caucasian families. So while the policymakers of the other services may be concerned that the all-volunteer force will bring forth an overabundance of qualified non-Caucasian enlistees, the Navy's concern is the recruitment of at least a proportional number of non-Caucasians with the capacity to learn the skills required by the Navy.

In view of this problem, one should bear in mind that while the Navy has little control over cultural and socio-economic constraints, the Navy is in a position to exercise positive control over the opportunities available to a prospective non-Caucasian sailor. To date the majority of non-Caucasian representation in the Navy's enlisted ranks has been in the service-oriented job categories. Such categories include, among others, food and laundry service workers and stewards. Because of the non-Caucasian concentration of manpower in these areas, it is probable that a prospective non-Caucasian sailor would perceive his future assignments as also being in these areas, particularly if his educational background is weak. Such a perception would be likely to deter enlistment for at least three reasons. First, service skills as they exist in the Navy are not easily transferred to well-paying civilian jobs. A recruit who is undecided about a Navy career at the time of his first enlistment will undoubtedly seek training during this tour which will enable him to qualify for a relatively high paying job in the civilian labor market should he decide against a Navy career. In other words, the potential recruit probably views the offer of valuable job training during the initial enlistment as a primary inducement to "give Navy life a chance." The expectation of no training or inadequate training will adversely influence his willingness to take such a chance. Second, since many service members retire after 20 years of active duty expecting to pursue a new career, the kinds of skills and experiences taken from the Navy are equally valuable to men in this

category. Third, many Navy occupations, but infrequently those in the service category, offer additional pay and bonuses, sometimes amounting to several thousands of dollars, as well as the expectation of rapid promotion. A potential recruit expecting to enter one of the service-oriented occupations could hope to receive few, if any, of these benefits.

Closely related to the motivation of a prospective recruit through training and occupational opportunities is the ability of the service to offer training that qualifies a recruit for the job of his choice. This is a function of the occupational structure of that service. This occupational structure, however, may influence the ability of the service to meet its manpower needs in a less direct but potentially damaging way. If the segment of the population from which enlisted personnel are traditionally drawn view the service as having an inferior set of occupational opportunities, they are unlikely to seriously consider enlistment. Should prospective non-Caucasian recruits gain evidence, either through the media or through personal acquaintance, that the Navy offers them only inferior or "dead end" occupations, it could reasonably be expected that recruitment of talented non-Caucasians would be adversely affected.

Beyond the importance of the Navy's occupational structure as an inducement to the prospective recruit, knowledge of this structure might possibly aid Navy recruiting in another way. When compared to the occupational structures of various regions within the Nation, one could identify those areas where the population possessed a high density of the characteristics which the Navy found to be in short supply. Recruiting efforts could then be made both more successful in meeting the manpower needs of the service and more cost effective if directed toward large pockets of manpower known to exhibit certain predetermined characteristics. These considerations take on added importance in dealing with the recruitment of qualified non-Caucasians since the non-Caucasian population is frequently concentrated in urban areas and displays considerable diversity of occupational structure in different regions of the country.

Methodology. In order to analyze the problems and hypotheses suggested above, it was necessary to attempt a cross-classification of Navy specialties, or ratings, into the major occupational classifications used by the Bureau of the Census. Some degree of caution must be used in such cross-references, however, since the classification of a person into an occupational group is hardly an exact science even within a particular classification method.

Although judgment must play a part in occupational classifications (or cross-classifications), the end product—an occupational distribution of the work force—goes far beyond a categorization of the kinds of jobs which people perform. As Alba Edwards observed in 1943 when occupational classification systems were still in their formative stages:

> Occupational statistics, classified by major industrial divisions, are useful for showing in summary form the industrial distribution of the Nation's labor force. They are useful in the analysis of problems in which the workers are considered merely or mainly as a productive force. But in the analysis of many of the problems which concern workers as people, and not merely as productive machines, as well as in the analysis of social and economic problems generally, there is, and long has been, a real need for statistics showing in summary form an occupational distribution of the Nation's labor force—a need for statistics that cut across industry

> lines and bring together into one occupationally homogeneous group all workers belonging to the same social-economic class, with but minor regard to the particular industrial field in which they work.[5]

While a matching of specific jobs in the military with the civilian occupational structure involves some judgment and perhaps invites error, it does make possible a comparison of "all of the workers belonging to the same social-economic class" irrespective of their "industry." We are thus able to view the military service not only from the vantage point of being able to see its relation to the Nation's work force, but also to generalize on the attractiveness of the service with respect to the occupational opportunities it offers specific employment groups.

The method by which this cross-classification was accomplished involved a three-step process. First, each individual Navy occupation was matched with the civilian occupation to which it is most highly correlated. To minimize the margin of error in this exercise, the *Military-Civilian Job Comparability Manual,*[6] a publication of the Department of Defense, recommended for employers seeking to hire veterans, which identifies the civilian occupation most highly related to a Navy rating, was used. Second, the occupation in question was located within the classification system used by the Bureau of the Census. For this phase of the process, the *Alphabetical Index of Industries and Occupations*[7] was used. Third, the individual Navy ratings, having been cross-classified, were grouped into the various census categories as shown in table 1. Additionally, data detailing the "on-board" population, manpower allowance, and racial distribution for the different ratings was aggregated according to census groups and is shown in table 2. In order to maximize the accuracy of the cross-classifications, no attempt was made to classify Navy personnel who had no designated occupational specialty. These include only seamen (SN), firemen (FN), airmen (AN), and constructionmen (CN), personnel whose duties involve a very wide variety of unspecified tasks. Although one might expect that these "unclassified personnel" (who, incidentally, are found only in the lowest three pay grades) would best be designated as nonfarm labor when cross-classified into census groupings, such a categorization, given the diversity of tasks involved, would be imprecise at best and consequently was not attempted. Moreover, the *Military Civilian Job Comparability Manual* does not indicate a related job for these personnel.

Column (1) of table 2 indicates the distribution of enlisted Navy personnel by the Bureau of the Census occupational groups after their cross-classification according to table 1. Additionally, table 2 provides three distributions of these persons by race. Columns (2) through (5) show the number and percentages by race within each occupational group. The distribution of all Navy personnel, including those designated as "unclassified," is shown in cclumns (6) and (7). Columns (8) and (9) detail how classified Navy personnel are distributed by race. For the purpose of comparing Navy data with the U.S. census data or that of the Bureau of Labor Statistics, the third breakdown is superior to the second since these columns distribute Navy enlisted workers with identifiable occupations just as the census assigns an occupation to all civilian workers in calculating their statistics. So, rather than considering a distribution with elements that cannot be compared to the census and consequently deflating the value of those elements that were comparable, we judged it more meaningful to compare populations which are similarly defined.

Of immediate interest is the data

TABLE I—CROSS-CLASSIFICATION OF U.S. NAVY ENLISTED RATINGS WITH BUREAU OF THE CENSUS OCCUPATIONAL GROUPINGS

Occupational Groups[a]	Navy Titles Included[b, c]
I. Classified	
A. White Collar	
1. Professional and Technical	EW, ST, FT, MT, ET, DS, CTM, CTI, JO, DM, MV, AT, AX, AQ, AG, ID, PH, PT, HM, DT, HN, DN
2. Managers and Administrators	PI, CU, EQ, AF, AV
3. Sales	None
4. Clerical	RD, RM, CTT, CTA, CTO, CTR, YN, PN, DP, SK, DK, PC, AC, AK, AZ
B. Blue Collar	
1. Craftsmen	OT, TM, GM, MN, IM, MM, EN, BT, BR, EM, IC, ML, CE, EO, CM, BU, AD, AW, AO, AE, AM, AS, OM, LI, ME, HR, SF, PM, SW, VT, AB
2. Operatives	BM, QM, SM, EA, PR
3. Nonfarm laborers	None
C. Service	
1. Private household workers	None
2. Service except private household	CS, SH, DC, SD, TN
D. Farm Workers	None
II. Unclassified	SN, FN, CN, AN

Sources: a. U.S. Bureau of the Census, *1970 Census of Population Alphabetical Index of Industries and Occupations,* (Washington, D.C.: U.S. Govt. Print. Off.).

b. Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), *Military-Civilian Job Comparability Manual* (Department of Defense, not dated).

c. See appendix A for the titles corresponding to the standard Navy Alpha Code designations.

clearly representing the heavy concentration of non-Caucasian Navy personnel in the service worker category. There are nearly as many non-Caucasian service workers as there are Caucasian service workers, although non-Caucasians comprise only about 10 percent of the Navy. As can be seen in column (7), one-third of the Navy's non-Caucasian personnel (3.1/9.6) can be found among service workers whose rates involve less than 7 percent of all "on board" personnel. Or, from another perspective, column (5) shows that, if nonclassified personnel are excluded, non-Caucasians are so heavily concentrated among service workers that in no other designated occupation do they reach their servicewide participation rate of 9.6 percent. Additionally, column (5) shows that non-Caucasians comprise less than 1 percent of those in the "managers and administrators" classification which, in our cross-classification, is made up of exclusively master chief petty officers (pay grade E-9). These are the most senior Navy enlisted personnel in terms of military precedence and generally receive the highest pay.

While it is true that, in addition to service workers, unclassified workers also surpass the Navy-wide participation rate for non-Caucasians, it was noted before that unclassified workers are

TABLE 2—OCCUPATIONAL GROUP OF CURRENT ON BOARD NAVY ENLISTED PERSONNEL BY RACE, MARCH 1971

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Caucasian		Non-Caucasian		As Percent USN		As Percent Classified Personnel	
	Total	Number	Percent	Number	Percent	Caucasian	Non-Caucasian	Caucasian	Non-Caucasian
On Board	556,505	503,168	90.4	53,337	9.6	90.4	9.6	90.7	9.3
Unclassified	134,450	120,375	89.5	14,075	10.5	21.6	2.5	---	---
Classified	422,055	382,793	90.7	39,262	9.3	68.8	7.1	90.7	9.3
White Collar	187,817	176,940	94.2	10,877	5.8	31.8	2.0	41.9	2.6
Professional and Technical	104,151	100,139	96.1	4,012	3.9	18.0	.7	23.7	1.0
Managers and Administrators	638	633	99.2	5	.8	.1	.0	.2	.0
Sales	---	---	---	—	---	---	---	---	—
Clerical	83,028	76,168	91.7	6,860	8.3	13.7	1.2	18.1	1.6
Blue Collar	199,154	188,192	94.5	10,962	5.5	33.8	2.0	44.6	2.6
Craftsmen1	174,090	165,216	94.9	3,874	5.1	29.7	1.6	39.2	2.1
Operatives	25,064	22,976	91.7	2,088	8.3	4.1	.4	5.4	.5
Nonfarm laborers	—	—	—	---	---	---	---	—	---
Service Workers	35,084	17,661	50.3	17,423	49.7	3.2	3.1	4.2	4.1
Private household	---	—	—	---	---	---	---	---	---
Service except private household	35,084	17,661	50.3	17,423	49.7	3.2	3.1	4.2	4.1
Farm Workers	—	---	—	—	---	---	—	---	---

Sources: a. Department of the Navy, Bureau of Naval Personnel, *Navy and Marine Corps Military Personnel Statistics,* 31 March 1971 (NAVPERS 15658).

b. Department of the Navy, Bureau of Naval Personnel, *Citizenship and Race by Rating of Enlisted Personnel on Active Duty,* 31 March 1971 (PERS-N212).

exclusively in the lowest three of the Navy's pay grades. The disproportionate percentage of non-Caucasians in these pay grades can be found in column (5) of table 3. Additionally, the general trend toward lower percentages of non-Caucasians in the higher pay grades is clearly represented. Although Navy-wide participation by non-Caucasians in the most senior pay grade, E-9, is greater than the rate of non-Caucasian participation in those ratings composed exclusively of E-9's, as discussed in the preceding paragraph, Navy-wide participation in this pay grade, 2.7 percent, is still significantly less—less than one-third—of the Navy-wide participation rate of 9.6 percent for non-Caucasians.

Table 4 presents a comparison of Navy active duty personnel to manpower allowances for the various occupational specialties in terms of U.S. census job classifications. Although column (5) discloses that the Navy's overall stock of manpower in 1971 was slightly in excess of allowance, 101.5 percent, the specific areas of manpower surplus deserve closer attention. Unclassified personnel and service workers both show a general surplus, but all other occupational classifications are below manpower allowance. Perhaps the most significant observation thus far can be made when the data from tables 2 and 4 are placed in juxtaposition. Only in those occupational classifications where a general surplus of manpower exists does a rate of participation for non-Caucasians in excess of their Navy-wide participation rate also exist. Conversely, only in those occupational classifications where a general shortage of manpower exists is there a rate of participation for non-Caucasians less than their Navy-wide participation rate. Should the Navy seek to adjust these surpluses and shortages in a manner that would also effect a more consistent participation rate among occupations for non-Caucasians, it would seem that consideration might be given to at least two policies. First, in order to redistribute manpower according to race, retraining in a white- or blue-collar skill might be made available to non-Caucasians already in a service category on a

TABLE 3—CURRENT ON BOARD NAVY ENLISTED PERSONNEL BY PAY GRADE AND RACE, MARCH 1971

	(1)	(2)	(3)	(4)	(5)
		Caucasian		Non-Caucasian	
	Total	Numbers	Percent	Numbers	Percent
All Pay Grades	556,505	503,168	90.4	53,337	9.6
E-9	3,382	3,290	97.3	92	2.7
E-8	9,125	8,634	94.6	491	5.4
E-7	38,632	34,911	90.4	3,721	9.6
E-6	79,200	69,634	87.9	9,566	12.1
E-5	91,595	83,632	91.3	7,963	8.7
E-4	125,545	117,121	93.3	8,424	6.7
E-3	135,497	121,768	89.9	13,729	10.1
E-2	55,825	49,030	87.8	6,795	12.2
E-1	17,704	15,148	85.6	2,556	14.4

Source: Department of the Navy, Bureau of Naval Personnel, *Citizenship and Race By Pay-Grade of Enlisted Personnel on Active Duty,* 31 March 1971 (PERS-N212).

TABLE 4—OCCUPATIONAL GROUP OF NAVY ENLISTED PERSONNEL, ALLOWANCES AND CURRENT ON BOARD STATUS, MARCH 1971

	On Board			Percent Allowance
	Number	Percent	Allowance	On Board
Total	556,505	100.0	548,132	101.5
Unclassified	134,450	24.3	115,710	116.2
Classified	422,055	75.7	432,422	97.6
White Collar	187,817	33.7	192,235	97.7
Professional and Technical	104,151	18.7	105,524	98.7
Managers and Administrators	638	.1	851	75.0
Sales	---	---	---	---
Clerical	83,028	14.9	85,860	96.7
Blue Collar	199,154	35.7	206,987	96.2
Craftsmen	174,090	31.3	181,790	95.8
Operatives	25,064	4.4	25,197	99.5
Nonfarm laborers	---	---	---	---
Service Workers	35,084	6.3	33,200	105.7
Private households	---	---	---	---
Service except private households	35,084	6.3	33,200	105.7
Farm Workers	---	---	---	---

Source: Department of the Navy, Bureau of Naval Personnel, *Navy and Marine Corps Military Personnel Statistics,* 31 March 1971 (NAVPERS 15658).

priority basis. Second, recruiting programs might be patterned in such a way as to emphasize the procurement of non-Caucasians for occupational specialties where non-Caucasian participation is comparatively low.

An approach to the second of these policy measures—identifying and recruiting in those locations where there appears to exist an abundance of particular workers with a history of needed specialties—is to examine either the occupational characteristics data published decennially by the Bureau of the Census or that based on more frequent samples as published by the Bureau of Labor Statistics. The most disaggregated data available has been compiled by the Bureau of Labor Statistics from samples taken in the Standard Metropolitan Statistical Areas (SMSA). While this data might be most useful in putting the suggested procedures into operation, it was considered too bulky for present purposes.[8] The statistics instead utilized are unpublished data from the Current Population Survey.[9] They are chosen because they agree most closely with the data of the Navy statistics and are disaggregated only to the extent of breaking the United States into four major regions: Northeast, North Central, South, and West.[10] In any event, even a detailed analysis which used the Standard Metropolitan Statistical Area data would undoubtedly first examine the regional distributions for general clues as to which regions might contain the SMSA's with the occupational characteristics desired.

Matching Manpower Needs. Table 5 represents the United States and regional occupational structures by race. In 1971 white-collar occupations employed nearly one-half of the Nation's civilian work force but only about one-third of the Navy's enlisted personnel (table 4). Among all civilians more than 50 percent of the white workers, but only about 30 percent of the nonwhite workers, were employed in these occupations. This corresponds with respective Navy occupation per-

TABLE 5—OCCUPATION OF EMPLOYED PERSONS FOR REGIONS BY RACE, AVERAGE ANNUAL PERCENTAGES, 1971

	United States			Northeast		North Central		South		West	
	Total	White	Non-White	White	Non-White	White	Non-White	White	Non-White	White	Non-White
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White Collar	48.3	50.6	29.1	52.9	38.4	46.9	31.8	51.1	20.4	53.1	44.8
Professional and Technical	14.0	14.8	9.0	15.6	11.4	13.5	9.2	13.9	6.9	16.4	13.1
Managers & Administrators	11.0	11.8	4.1	11.4	4.1	10.6	4.1	12.9	3.0	12.4	7.7
Sales	6.4	6.9	2.3	6.8	2.4	6.4	2.4	7.2	1.7	7.4	4.2
Clerical	17.0	17.4	13.7	19.1	20.5	16.4	16.0	17.1	8.7	17.2	19.7
Blue Collar	34.4	33.7	39.9	34.1	36.8	34.5	42.7	34.5	42.3	30.3	31.3
Craftsmen	12.9	13.5	7.9	13.3	8.2	13.2	8.5	14.2	7.4	12.9	8.5
Operatives	16.4	15.8	21.6	16.7	21.8	16.7	25.3	16.0	21.9	12.5	15.6
Nonfarm laborers	5.1	4.5	10.3	4.1	6.8	4.6	8.8	4.4	13.1	4.9	7.2
Service Workers	13.5	11.8	27.6	11.8	24.6	12.6	25.3	10.1	31.3	13.3	21.3
Private household	1.8	1.2	7.3	1.0	4.7	1.4	4.3	1.1	10.7	1.6	2.5
Service except private household	11.6	10.6	20.3	10.8	19.9	11.2	20.9	9.1	20.6	11.7	18.8
Farm Workers	3.8	3.9	3.4	1.2	0.1	6.1	0.3	4.2	6.0	3.3	2.6
Farmers & farm managers	2.1	2.3	0.7	0.6	0.0	3.8	0.1	2.7	1.2	1.4	0.9
Farm laborers & foremen	1.7	1.6	2.7	0.6	0.1	2.3	0.2	1.5	4.8	1.9	1.7

Source: a. Calculated from unpublished data provided by the Bureau of Labor Statistics from the U.S. Department of Labor's Current Population Survey.

centages of approximately 30 and 20. A nonwhite civilian worker is more than twice as likely to be in a service occupation as a civilian white worker. In the Navy, as observed before, this ratio is about 5 to 1. These figures support the earlier suggestion that non-Caucasians may well view the occupational opportunities offered by the Navy as less promising than those in the civilian economy, hence their low enlistment rates.

While this data is true for the Nation as a whole, there exists considerable diversity of occupational structure when a regional comparison is made. Nonwhite workers are twice as likely to be in white-collar occupations in the Northeast and West as they are in the South. While in the West nonwhites are more likely to hold blue-collar than white-collar occupations, blue-collar work employs a relatively small percentage of the work force, and the racial makeup in this category is approximately equal. Nonwhites are about twice as likely as whites to be in service occupations in the Northeast and North Central, but in the South they are three times as frequently found in these occupations. This diversity of structure is generally greater in the more detailed occupational categories and, as suggested above, would undoubtedly be far greater for disaggregated regional data.

Having assumed that the Navy is seeking greater percentages of non-Caucasians in the skilled ratings and having identified these occupations where shortages and surpluses occur, it is possible to suggest areas where the Navy might recruit to meet its specific needs. For example, if the Navy desired to recruit more nonwhite craftsmen, being below allowance in that occupation, it would not choose to look in the South which has a relatively small percentage of these workers when compared to other regions. Similarly, an attempt to avoid the recruitment of additional nonwhite sailors with service work orientations would also indicate that the Navy should avoid the southern region. These statements are by no means meant to be substantive with respect to the Navy's actual recruiting at the present time but are used to illustrate a process by which a target orientated recruitment plan could be implemented. As was suggested earlier, data from SMSA's would probably be well suited to actually pinpointing specific recruiting areas. Variables which might further aid in the selection of recruiting areas could be the education level of a region's population, its age distribution, and the distribution according to sex in the various occupations. The overall occupational structure, however, would appear to be the most important single element and the one which recruiters should initially determine, if cost-effective recruiting of non-Caucasian personnel is to be expedited.

The adverse opportunities structure for non-Caucasians in the Navy has created a situation which is not likely to be self-correcting. The direct and negative feedback that a prospective sailor receives from acquaintances with experience in the Navy can only seldom be overcome by aggressive recruitment alone. Fortunately, the Navy is in a good position to make immediate progress toward upgrading the occupational structure of non-Caucasians. Since there is a surplus of personnel in the service work category and manpower shortages generally exist elsewhere, an increased selective retraining rate of those non-Caucasians already in the Navy, especially those in their second and third enlistments, could markedly improve present occupational opportunities for both those in the service and for the prospective recruit. Of more important long-run significance to the attainment of the proper racial distribution in occupational structures is the Navy's recruiting program. Realizing that the armed services are perhaps the

only organizations recruiting nationwide across a broad range of skill levels, it is necessary that this program be efficient and cost effective in finding recruits capable of increasing the number of direct accessions into higher ranks. Armed with knowledge of the Navy's needs and with presently available distributions of regional occupational data, the Navy's recruiting strategists should be better able to locate areas where their efforts will make a maximum contribution toward meeting the manpower needs of an all-volunteer Navy.

BIOGRAPHIC SUMMARY

Assistant Professor Roger D. Little is a member of the Department of Economics at the U.S. Naval Academy. He is a graduate of Tufts University and holds M.A. and Ph.D. degrees from the University of Houston. Having participated in the NROTC program as an undergraduate he completed a tour of active duty as an officer in the U.S. Marine Corps Reserve serving with the First Marine Corps Aircraft Wing in Japan and as communications officer for the Marine Corps Air Facility, Futema, Okinawa. Presently in his fourth year at the Academy, Professor Little additionally teaches part time at the graduate level in the MBA program for The George Washington University. While his primary research area is black and white occupational differences, he pursues an active interest in aspects of technological change and productivity.

BIOGRAPHIC SUMMARY

Raymond F. Turner holds a B.B.A. and M.B.A. from the University of Cincinnati. He has served as an Assistant Professor of Economics at the U.S. Naval Academy and at Anne Arundel Community College, Arnold, Maryland. He has also taught the extension course in National Security Management for the Industrial College of the Armed Forces. Formerly a U.S. Navy Supply Corps Officer, Mr. Turner served in South Vietnam as the General Stores Officer at Naval Support Activity, Da Nang and later as the Special Projects Officer for Logistics on the staff of the Commander, U.S. Naval Forces, Vietnam in Saigon. In addition to being an active participant in the Naval Reserve, Mr. Turner is presently a Ph.D. candidate in economics at the Catholic University of America, Washington, D.C.

NOTES

1. See, for example, Joseph A. Califano, Jr., "The Question of an All-Volunteer U.S. Armed Force," *Congressional Digest*, May 1971, p. 147.

2. *The Report of the President's Commission on an All-Volunteer Force* (Washington: U.S. Govt. Print. Off., 1970), pp. 145-150.

3. *Ibid.*, p. 144.

4. Rarely do Navy enlisted personnel in less skilled occupations qualify for proficiency pay and variable reenlisted bonuses.

5. Quoted in James G. Scoville, *The Job Content of the U.S. Economy, 1940-1970* (New York: McGraw-Hill, 1969), pp. 5-6.

6. Office of the Assistant Secretary of Defense Manpower (Manpower and Reserve Affairs), *Military Civilian Job Comparability Manual* (Department of Defense, not dated).

7. U.S. Bureau of the Census, *1970 Census of Population Alphabetical Index of Industries and Occupations* (Washington: U.S. Govt. Print. Off.).

8. For similar reasons we did not utilize more detailed occupational breakdowns, although these are often available.

9. These data do not show the sex of the worker. Sex was deliberately excluded from the analysis even though the Navy is, of course, predominately male. This factor is rapidly changing, and the Navy undoubtedly will be more efficient when larger numbers of females are recruited to fill specific needs.

10. Most census publications specify the states included in each region.

APPENDIX A

STANDARD NAVY TITLES WITH ALPHA CODE DESIGNATIONS

Aerographers's Mates (AG)
Air Controlmen (AC)
Aircraft Maintenancemen (AF)
Aircrew Survival Equipmentmen (PR)
Airmen (AN)
Aviation Antisubmarine Warfare Operators (AW)
Aviation Antisumbarine Warfare Technician (AX)
Aviation Boatswain's Mates (AB)
Aviation Electrician's Mates (AE)
Aviation Electronics Technicians (AT)
Aviation Fire Control Technicians (AQ)
Aviation Machinist's Mates (AD)
Aviation Maintenance Administrationmen (AZ)
Aviation Ordnancemen (AO)
Aviation Storekeepers (AK)
Aviation Structural Mechanics (AM)
Aviation Support Equipment Technicians (AS)
Avionics Technicians (AV)

Boatswain's Mates (BM)
Boilermakers (BR)
Boilermen (BT)
Builders (BU)

Commissarymen (CS)
CTA (Administrative)
CTI (Interpretive)
CTM (Maintenance)
CTO (Communications)
CTR (Collection)
CTT (Technical)
Communication Yeoman (CYN)
Construction Electricians (CE)
Construction Mechanics (CM)
Constructionmen (CN)
Constructionmen (CU)

Damage Controlmen (DC)
Data Processing Technicians (DP)
Data Systems Technicians (DS)
Dental Technicians (DT)
Dentalmen (DN)
Disbursing Clerks (DK)

Electrician's Mates (EM)
Electronics Technicians (ET)
Electronics Warfare Technicians (EW)
Engineering Aides (EA)
Enginemen (EN)
Equipmentmen (EQ)
Equipment Operators (EO)

Fire Control Technicians (FT)
Firemen (FN)

Gunner's Mates (GM)

Hospitalmen (HN)
Hospital Corpsmen (HM)
Hull Maintenance Technicians (HT)

Illustrator Draftsmen (DM)
Instrumentmen (IM)
Interior Communications Electricians (IC)

Journalists (JO)

Lithographers (LI)

Machinery Repairman (MR)
Machinist's Mates (MM)
Minemen (MN)
Missile Technicians (MT)
Molders (ML)
Musicians (MU)

Ocean Systems Technicians (OT)
Opticalmen (OM)

Patternmakers (PM)
Personnelmen (PN)
Photographer's Mates (PH)
Photographic Intelligencemen (PT)
Postal Clerks (PC)
Precision Instrumentmen (PI)

Quartermasters (QM)

Radarmen (RD)
Radiomen (RM)

Seamen (SN)
Shipfitters (SF)
Ship's Servicemen (SH)
Signalmen (SM)
Sonar Technicians (ST)
Steelworkers (SW)
Stewards (SD)
Stewardsmen (TN)
Storekeepers (SK)

Torpedoman's Mates (TM)
Tradesmen (TD)

Utilities Men (UT)

Yeomen (YN)

The end of World War I was accompanied by a worldwide demand for arms limitation, a demand that most major governments seemed willing to accommodate. Concentrating as it did on naval armament, perhaps the most significant effort was an attempt to place limits on the submarine. The moral aspect of the antisubmarine position—which had played so forceful a role in Allied propaganda—was, however, no match for the weapon's obvious military value at the conference table. One can only hope that the inflexibility and paranoia displayed in 1921 will serve as a constructive lesson for the SALT efforts of today.

THE SUBMARINE AND THE WASHINGTON CONFERENCE OF 1921

An article prepared
by
Professor Lawrence H. Douglas

Following the First World War, the tide of public opinion was overwhelmingly against the submarine as a weapon of war. The excesses of the German U-boat had stunned the sensibilities of the world but had, nonetheless, presented new ideas and possibilities of this weapon to the various naval powers of the time. The momentum of these new ideas proved so strong that by the opening of the first major international disarmament conference of the 20th century, practical uses of the submarine had all but smothered the moral indignation of 1918.

Several months prior to the opening of the conference, the General Board of the American Navy was given the task of developing guidelines and recommendations to be used by the State Department in determining the American proposals to be presented. The orientation of this group, simply stated, was that second best in naval strength meant last. A policy of naval superiority was necessary, they felt, for "history consistently shows that war between no two peoples or nations can be unthinkable."[1] A second group, the Naval Advisory Committee (Admirals Pratt and Coontz and Assistant Secretary of the Navy Theodore Roosevelt, Jr.) also submitted recommendations concerning the limitation of naval armaments. From the outset their deliberations were guided by a concern that had become more and more apparent—the threat posed to the security and interests of this country by Japan. This concern was evidenced in an attempt to gain basic understandings with Britain.

The submarine received its share of attention in the deliberations of these two groups. One approach to the

weapon, considered in a draft proposal submitted by Capt. F.H. Schofield, called for the total and permanent abolition of submarines and the destruction of all submarines, built and building.[2] In support of his proposal, Schofield noted that the relative strengths of the world's navies would not be materially affected by such a move, and increasing the numbers of submarines would involve large expenditures for antisubmarine warfare (ASW) vessels. However, save this one proposal, the elimination of any armament by type received scant attention in these early recommendations as it was thought to hold little promise of success.[3]

A second approach to the problem was to scrap submarines then in existence and place restrictions upon new construction, thereby establishing maximum tonnage allowances in vessel types permitted each power. The Advisory Committee drew up three plans involving this basic principle and submitted them to the General Board and the Secretary of the Navy on 20 October 1921. Under plan I the submarine tonnage recommended for this country and England was a maximum of 90,000 tons, while Japan, France, and Italy were each allotted 54,000 tons.[4] Those submarines building at the time of the Conference could be completed up to the assigned tonnage, but no new construction would be permitted except to replace those units reaching 12 years of service. Plans II and III were quite similar to plan I but for the maximum allowed tonnage (85,000 tons for England and the United States and 51,000 tons for the other powers). The Navy Department was of the opinion that plan I "is the best plan and is the one which . . . it advises be adopted."[5]

A memorandum prepared for the General Board by Capt. H.H. Bemis of the Submarine Section of the Office of Naval Operations expressed the opinion of those professionals who favored retention of the submarine. After noting the improved capabilities and the primary uses of the submarine, Bemis opposed its abolition " . . . chiefly on account of the impossibility of doing so."[6] "History," continued Bemis, "shows only too well the value of a 'scrap of paper' when the life of a nation is at stake." Alluding to England, he also noted that, "Two weapons are now in hand that challenge her supremacy, one of which is the submarine, and, naturally, she would be glad to see that 'outlawed.'" In concluding this section of his memorandum, Captain Bemis observed that relative to the Pacific, "the United States will make a criminal mistake if she becomes a party to an agreement to abolish submarines."[7]

Assistant Secretary of the Navy Roosevelt expressed his agreement with Bemis in a paper entitled "Limitation of Armaments." "In an assumed war against the world," he wrote, "the submarine would be of most value . . . against the two island empires—Great Britain and Japan." It was imperative that we "not permit our hands to be tied as regards submarines."[8]

In this same paper Roosevelt observed that Japan was our most probable enemy at present, and if the Conference did not provide us with a dominating naval strength in the Pacific, we should conclude a "treaty such that Japan cannot break it as regards us without breaking it with others." In other words, an "entangling alliance." With an eye on the development of new weapons, Roosevelt wrote that the United States should be the " . . . last nation to advocate any limitation upon the extension of recent weapons or the development of new ones."[9] The President, Secretary of the Navy Hughes, and Roosevelt agreed that disarmament was an impossible objective and that the reduction or limitation of armaments was all that could be hoped for.

The independently formulated General Board plans were, however, un-

acceptable to Hughes and Roosevelt for they were, as Roosevelt noted years later, "what one would have expected from the Naval Board—an estimate of limitations (based) on 'naval needs,' which represented not a limitation of armaments for the United States but an increase."[10] Such a plan was folly, and Roosevelt decided to consult Admiral Pratt whom he thought to be "the ablest naval statesman," and together they hit upon and developed the idea of using existing naval strength as the basis for the American proposals.

The plan laid before the Conference by Hughes at the first plenary session detailed a reduction and limitation of naval armaments for Great Britain, the United States, and Japan in a ratio of 5:5:3, respectively, but left the ratio for Italy and France for the Conference to determine.[11] Tonnage limitations consistent with the 5:5:3 ratio were assigned for each type of vessel with the submarine tonnage allotment being the same as that allowed in plan I of the Advisory Committee (i.e., 90,000 tons for Great Britain and the United States and 54,000 tons for Japan).[12]

At the second plenary session (15 November) the representatives of the various countries presented their replies to the American proposals. Arthur J. Balfour, representing the British Empire, noted the willingness of his country to accept the naval ratio suggested by Hughes but made such acceptance conditional upon the continued supremacy of England in European waters. The British also wished to retain complete freedom in the building of cruisers and other auxiliary types and limit only their battle fleet or capital ships.[13] This disagreement regarding cruisers was to plague Anglo-American relations for years following the Washington Conference and emphasized the differences between the roles and needs of these two naval powers. Great Britain, with a large global empire, needed both a battle fleet and a large number of commerce escort vessels, while the primary concern of the American Navy was defense of the continental United States.

Proceeding to the limitations proposed for submarines, Balfour reported that his country's experts thought the amount of submarine tonnage permitted was too large. He thought that the tonnage should be reduced further and suggested that the Conference might possibly "forbid altogether the construction of those . . . submarines of great size . . . whose sole purpose is attack . . . by methods which civilized nations regard with horror."[14] Only fleeting reference was made to the abolition of the submarine and then only to note that such a decision "would be impossible, or, if possible, it might well be thought undesirable to abolish it altogether."[15]

Delegations from the other countries at this second public meeting of the Conference voiced general satisfaction with the American proposals, but their remarks, and particularly those of France and Japan, indicated that each nation expected special consideration because of its particular situation (e.g., geography, current naval strength, national interests. etcetera).

Two memorandums prepared for the American representatives contained what eventually became the basic position of the United States regarding the question of submarine limitation used for the remainder of the Conference. A General Board memorandum (No. 43B, ser. 1088-dd) transmitted to the Secretary of the Navy on 15 November assumed that while unrestricted submarine warfare was indeed to be abolished, the submarine itself was an "effective and legitimate weapon of warfare." The depredations visited upon the world by the submarine in the last war were to be prevented from reoccurring not by outlawing the weapon but by clearly defining the rules under which the submarine was to operate in time of war.

The second memorandum, prepared by Capt. Sinclair Cannon of Colonel Roosevelt's staff, responded to several questions regarding the submarine that had been raised during the first meeting of the Subcommittee of Technical Experts (16 November) and was explicit as to why this country should retain a strong submarine force. The British had proposed that the tonnage be reduced from 90,000 tons to 45,000 tons for both themselves and the United States and that Japan be allotted 27,000 tons as opposed to the 54,000 tons originally proposed by the United States. In his memorandum to the Director of War Plans, Captain Cannon advised that such a substitution should not be allowed. One reason he discussed was the defense of the American island possessions in the Pacific where he considered the submarine an absolute necessity.[16] In the event of hostilities in the Pacific, observed Cannon, "the presence of submarines with our fleet would be of vital importance . . ."[17] The submarine as a determining factor in future operations of the British Navy also received Cannon's attention. With submarines reduced to a minimum, observed the captain, the British Fleet would be more at liberty to carry on offensive operations in the event of war, whereas, "if submarines are allowed, that fact in itself might prevent Great Britain from going to war . . . ."[18]

Although agreed upon in theory, the specific provisions of the proposed limitation ratio among the three major powers proved to be a source of continuing difficulty. With certain reservations, Great Britain accepted the ratio of 5:5:3 (10:10:6) as originally set forth by Hughes, but Japan proved to be considerably more recalcitrant in arriving at an understanding. Demanding security in her own waters and dissatisfied with the assurances that a four-power consultative pact might provide (as a substitute for the now defunct Anglo-Japanese alliance), Japan insisted that a 10:10:7 ratio be instituted. The General Board saw such a ratio as placing Japan in a position to "carry forward her aggressive policies in the Far East, thereby endangering the peace of the world."[19]

The ratio deadlock was broken by permitting Japan to keep a new construction battleship (*Mutsu*) originally slated for destruction and an agreement by England and the United States to nonfortification of their Pacific possessions.

Extending the ratio to France and Italy in the balanced proportion (1.67) also proved difficult. France demanded that she be allowed a ratio of 3.5, and Italy insisted on parity with France. After considerable debate and a personal appeal to Premier Briand by Secretary Hughes, France accepted the 1.67 ratio but made formal reservation to the extension of the limitation ratio to surface auxiliaries and to submarines which France considered to be of a purely defensive nature and necessary to insure her communications and security.[20] It became evident that French strategy had called for concessions in the capital ship ratio argument to support their later demands for increased auxiliary tonnage and to "introduce the submarine controversy."[21]

In spite of the acknowledged importance of the submarine limitation question, both the United States and Great Britain chose to defer discussion until the capital ship ratios had been at least tentatively agreed upon. In response to a request by the Netherlands that she be granted a large allotment of submarine tonnage, Roosevelt recorded this interpretation of the submarine ratio situation. "My view of the matter," wrote Roosevelt,

> is that we should get our established ratio for the three major naval powers and stick to it religiously. If we depart from it we will immediately get into a vexed situation [with] France . . . Fun-

> damentally England's real fear of France is based on submarine tonnage. If this were eliminated a mutual agreement would quickly be reached. [But if the Netherlands is allowed to build 45,000 tons] I could foresee trouble at once. We are accordingly preparing a reply for the State Department in which we urge that the matter be held in abeyance, and that America stand as she has stood, upon the ratio established by the three great powers.[22]

In addition, the General Board had indicated that the submarine tonnage proposed by the Secretary of State expressed the "maximum reduction in submarine armament to which the United States [could] subscribe."[23]

It was common knowledge among the conferees that Great Britain wished to pursue her often stated goal of submarine abolition. On 19 December Secretary Hughes and Roosevelt discussed the British position. Both agreed that it was a "foolish thing" but, from their meetings with Lee and Balfour, it was clear that the British were "set on the matter." Lee had told Roosevelt that the English did not feel that bringing the abolition question before the Conference would embarrass their position because "at no time did they expect [that] a decision in this matter, contrary to what they consider correct, would force them to leave the conference." The British were convinced that they would eventually have the submarine abolished by repeatedly hammering at it.[24]

That the French, however, were not prepared to outlaw the submarine was made clear 2 days later (21 December) when Roosevelt met with Admiral de Bon of the French delegation. The admiral informed Roosevelt that the French did not wish to "cut down on submarines" and asked for the "up-set figure" of American submarine needs, expressing his assumption that we would want only about 60,000 tons.[25] Roosevelt was of the opinion that France would want at least as much and that to allow such an amount would be "as good as not cutting down at all." Nor would Britain "hear to 60,000 tons for the French."[26] His conversation with de Bon only served to reinforce what he had felt for several days. "We will have to make our agreement on capital ships . . . and let the auxiliary tonnage insofar as submarines [are concerned] . . . go, pass by the board, with certain restrictions."[27]

The first extended discussion of submarine limitation took place during the fifth meeting of the Committee on Limitation of Armament (22 December) where Albert Sarraut of the French delegation pointed out that further discussion of naval limitation "could not be pursued without taking into account the question of submarines."[28] Lord Lee of Fareham, First Lord of the British Admiralty, noted that the question of submarines was of "transcendent importance" to the British Empire, and he regretted that this appeared to be the only question on which his delegation was out of sympathy with the American proposals and the views of France and the other powers.[29] Lee then presented figures to illustrate his contention that the American submarine proposals actually provided for an increase in the submarine fleets of the major powers.[30]

In a lengthy statement designed to counter the prosubmarine arguments of the other powers, Lee recounted the wartime experience of the submarine and noted that its real value was, and would continue to be, its utility as a commerce destroyer. The submarine, Lee maintained, was essentially an offensive weapon involving murder and piracy upon the seas. It was the only class of vessel for which the Conference was asked to give permission to thrive and multiply, and it would be a great disappointment to the British Empire if they could not persuade the Conference

to abolish this weapon.[31] Lee then offered to scrap the entire British submarine fleet of 80,000 tons, which was the "largest and probably the most efficient submarine navy in the world," provided the other powers would do likewise.[32] The sympathies of the other nations were visibly prosubmarine, however, and Lee hardly expected to convince all the powers to come round to the British point of view. With this in mind the British delegate noted that they had no intention of jeopardizing the capital ship agreement if they failed to carry the point regarding the submarine and would, therefore, welcome any suggestions for the reduction and restriction of the submarine.[33]

Following the presentation of the English case for abolition, the French representative Albert Sarraut presented his country's views on the submarine. His words reinforced the prosubmarine attitude the French had supported for many years. The submarine was an excellent defensive weapon, contended Sarraut, particularly for those nations without a large fleet of battleships. It was, therefore, an "excellent means of preserving her independence . . . especially in view of the sacrifices to which she has been asked to consent in the matter of capital ships."[34] As for the employment of the submarine in the war, noted Sarraut, there is "reason for condemning [the] belligerent, but not for condemning the submarine." The French spokesman concluded his remarks with the statement that

> . . . The French Government cannot consent to accept either the abolition of submarines, or a reduction of the total tonnage of submarines which it considers to be the irreducible minimum necessary to insure the safety of the territories for which it is responsible, or a limitation of the individual tonnage of submarines.[35]

In somewhat briefer statements, the Italian and Japanese representatives presented their official views of the submarine question. Senator Schanzer, speaking for Italy, supported the French contention that the submarine was a defensive weapon necessary to protect the lines of communication upon which Italy depended. The Italian delegation, observed the Senator, thought that a Conference involving only five of the world's navies could not settle a question which concerned so many others. In spite of its appreciation of the humanitarian arguments of the British delegation, concluded Schanzer, Italy could not associate itself with the proposal for submarine abolition.[36]

The Japanese delegate, Masanao Hanihara, presented similar arguments regarding the positive defensive capabilities of the submarine. As far as the legitimacy of the weapon was concerned, Hanihara pointed out that "any weapon might become illegitimate if used without restriction."[37] Furthermore, for an insular nation like Japan, submarines were relatively inexpensive, yet effective. Japan would favor, therefore, "more vigorous international rules governing their proper use."[38]

Hughes reinforced this position by reading the report on submarines adopted by the Advisory Committee of the American delegation on 1 December.[39] As a man-of-war, the submarine has a "very vital part to play,"[40] and as a scout, continued the report, "the submarine has great possibilities . . . it has value, a legitimate use, and no nation can decry its employment in this fashion."[41] Again alluding to the Japanese threat in the Pacific, the report declared that although the United States would never undertake unlimited submarine warfare, delay tactics until major fleet operations began could,

> . . . at some future time result in the United States holding its outlying possessions. If these colonies once fall, the expenditure of men necessary to recapture them will be tremendous and may result in a

drawn war which would really be a United States defeat. The United States needs a large submarine force to protect its interests.[42]

The United States had completely reversed its position on submarine abolition from that taken 3 years earlier at the Paris Peace Conference. England was now without support in her campaign to abolish the submarine.

At the next meeting of the committee (23 December) Admiral de Bon, speaking for his country, indicated that the Conference could not "reasonably limit submarine tonnage," but if such a limit were to be fixed, the American proposal of 90,000 tons was "the absolute minimum for all navies who may want to have a submarine force."[43]

Great Britain responded by accusing France of favoring the submarine because of its ability to wage a successful war against merchant fleets.[44] Balfour then attempted to win Italy to the abolitionist point of view by pointing out that country's vulnerability to submarine operations in its dependence on seaborne commerce. Italy, however, suggested that the best course to follow would be to place restrictions on the offensive operations of submarines rather than abandon what they considered a defensive weapon.[45]

The confrontation between Great Britain and France over the question of submarine abolition dominated the seventh session (24 December) of the committee also. Sarraut restated France's position that "An agreement had been reached on the reduction of offensive naval armaments, but the question of means of defense [i.e., submarines] must be left to the consideration of the countries interested."[46] Balfour countered by asking, "Against whom is this submarine fleet being built? What purpose is it to serve? What danger to France is it intended to guard against?" These were questions, noted Balfour, to which no satisfactory answers had been given, and the implications were a definite threat to British seapower.[47]

Secretary Hughes terminated the debate on the abolition of the submarine by saying that further discussion of the matter was futile and that it was impossible to "expect a result favorable to the adoption of . . . a resolution to abolish the submarine."[48]

With the abolition controversy ended, the Committee on Limitation of Armament turned its attention to the problem of quantitative and qualitative restrictions to be placed on submarines. As England had rejected the original American tonnage figure of 90,000 tons as being too large, Secretary Hughes now proposed that both Great Britain and the United States accept 60,000 tons as their maximum submarine tonnage while France, Italy, and Japan maintain their present tonnage as the maximum.[49]

This offer was readily accepted by the British delegation at the next meeting of the committee (also 24 December) but met with considerable argument from the other powers. Admiral de Bon stated that a minimum of 90 submarines (90,000 tons) were required to safeguard French security. To reduce their force below this limit, "was equivalent to abolishing the whole French program . . ."[50] The admiral informed the committee that the figures were so far below what they had originally contemplated that the French delegation must refer them to Paris for study. Italy announced that she would accept the new tonnage figures only on the condition that they represent parity with France.[51] The Japanese delegate pointed out that their acceptance of the original tonnage allowance of 54,000 tons called for a considerable sacrifice and compromise on their part and was the minimum tonnage acceptable to them.[52] Japan was so remotely situated, concluded her spokesman, "that it must be evident to all that her subma-

rines could not constitute a menace to any nation."[53] Secretary Hughes terminated the discussion on submarine limitation at this juncture to await the French reply to the new American proposal.

On the following Tuesday (27 December) Admiral Pratt submitted to Roosevelt a memorandum reviewing the discussions in the Committee of Fifteen since its formation by the Committee on Limitation of Armament. Pratt noted that "a certain amount of tension had resulted owing to the uncompromising attitude of Great Britain and France on the submarine question,"[54] and suggested that they put the submarine question "under the ice to cool" and stop discussing it.[55] Also, in recommending that the question of other auxiliary tonnage (cruisers, destroyers etcetera) not be raised until the submarine question was settled, Pratt warned that the United States should guard against the setting of a precedent by allowing Japan an out of ratio tonnage in an attempt to yield to France, for that country (France) might make a similar claim at a later date.[56]

Admiral Pratt was of the opinion that the submarine problem adversely affected aircraft carrier tonnage limitation which, in his mind, was second only to capital ship tonnage. It was important to settle this question first, and whether or not a decision was later reached in submarines, the purpose of the Conference would have been fairly accomplished. "The ratio is the Big Thing of this conference," wrote Pratt. "It is the power back of us which assures the Anglo-Saxon peoples that the rule of Constitutional government and its ideals during years of peace or of war shall be the law of land and of sea." To emphasize his point regarding the importance of the ratio, Pratt offered his resignation if it was departed from.[57]

During the evening of the same day (27 December), Hughes received a letter from the British delegation (Balfour) summarizing that country's position regarding the submarine. Balfour reiterated the British desire for total abolition. If this was not possible, however, they would favor any diminution in their number. But, noted Balfour, "no mere diminution in their numbers during peace would relieve us from the necessity of devising and preparing all practicable methods of dealing with them in war, so that no limitation of anti-submarine vessels would seem consistent with our national safety."[58] Antisubmarine vessels could, of course, include just about every type of vessel except capital ships, aircraft carriers, and fleet support ships.

That this was the only policy England had chosen to pursue was confirmed by the contents of a secret dispatch from Churchill to Balfour sent at the time of Balfour's initial pleas for submarine abolition. This dispatch was not made public until it was mentioned by Churchill during a speech in the House of Commons in 1930.[59]

In this letter, Churchill lauded the British delegation's decision to press for total abolition of the submarine. "We apprehend, however," continued Churchill,

> that there is very little chance of the abolition of submarines being agreed upon, and in this event we must insist at all costs upon absolute freedom in regard to the character and number of all vessels under, say, 10,000 tons. We cannot, in the face of French freedom to construct a great submarine fleet, to say nothing of the submarine and cruiser concentration of other powers, enter into any agreement fettering our liberty to build whatever numbers and classes of cruisers and anti-submarine warfare craft we may consider necessary . . ..
>
> Even at the cost of a complete rupture, we feel certain that you

> will not agree to any restriction in this sphere without previous consultation with the cabinet.[60]

It is evident that the submarine was the key to any meaningful limitation beyond the agreement already reached for capital ships.

Formal discussion of submarine limitation resumed 28 December with the ninth gathering of the Committee on Limitation of Armament. France aggravated an already strained situation by refusing to accept the status quo offer (31,500 tons) for submarine tonnage made by Hughes at an earlier meeting (24 December). Sarraut informed the committee that his government had concluded that

> . . . it is impossible to accept a limitation below 350,000 tons for auxiliary craft and 90,000 tons for submarines, without imperiling the vital interests of the country and its colonies and the safety of their naval life. The French Delegation has been instructed to consent to no concession in regard to the above figures.[61]

Even though the French indicated their acceptance of the capital ship allowance assigned to them (175,000 tons) in the same announcement and thereby kept the ratio intact, there was little warmth in the remarks accorded the French decision on the submarine. Hughes was "disappointed" with the French statement. If France had 90,000 tons of submarines, both the English and Americans would have to greatly increase their submarine fleets. This, noted Hughes, could hardly be called limitation or reduction[62] and raised the serious question whether anything might be accomplished in regard to submarines and auxiliaries.

Balfour was "profoundly disappointed" and pointed out that the threefold increase in submarine tonnage proposed by France would make her equal to the major naval powers. This he viewed as a "somewhat singular contribution to a Conference called for the diminution of armament."[63] Why, continued Balfour, did a fleet of capital ships of 175,000 tons require 90,000 tons of submarines to scout for it and protect it? It was perfectly obvious, stated the English representative, "that the proposed 90,000 tons of submarines were intended to destroy commerce." It should be perfectly clear, concluded Balfour, that if the French were permitted to build 90,000 tons of submarines, "no limitation of any kind on auxiliary vessels capable of dealing with submarines could be admitted by the government which he represented."[64] The division in attitude toward the submarine engendered by the French refusal to accept limitation of their submarine force and the British plan to maintain freedom in constructing auxiliary craft rendered any agreement to limit the tonnage of submarines at the Conference impossible. Realizing this, at a meeting of the Committee of Fifteen on the same day, the various national representatives "agreed to disagree" on the submarine issue.

The Committee of Limitation of Armament reconvened for its afternoon session at 3:30, and following the discussion of a proposed limitation of cruiser tonnage and maximum gun caliber for use aboard cruisers, Hughes suggested that the committee consider the action to be expressed by the powers as regards the illegal use of submarines. Elihu Root then presented three resolutions designed to place certain restrictions upon the operations of submarines through universal adherence to international laws[65] regarding the search, seizure, and destruction of merchant vessels in time of war; the prohibition of the use of submarines as commerce destroyers; and the outlawing of unrestricted submarine warfare.[66] The reading of the resolutions garnered enthusiastic and warm replies from the assembled representatives, but all the

nations—except Great Britain—wished to study them in detail and deferred discussion until a later date.[67]

At the next meeting of the committee (20 December) Admiral de Bon, supported by the Italian and Japanese representatives, recommended that the resolutions be submitted to a group of jurists for further study. Root, however, declared that neither he nor the resolutions were "going to be buried under a committee of lawyers." "Either the delegates assembled here," stated Root, "... must speak clearly and intelligently the voice of humanity which had sent them here, and to which they must report, or that voice would speak for itself, and speaking without them, would be their condemnation."[68] Roosevelt described the debate over the resolutions as "voluble and acrid" but personally did not think the submarine resolution (No. 2) amounted to much. It was, however, the "kind of a subject which gives to diplomats an opportunity for cantankerous disagreement."[69]

On 30 December the committee opened discussion on the second Root resolution relating to the elimination of the submarine as a commerce destroyer. This meeting was the setting for one of the most heated exchanges between Great Britain and France due, in part, to a series of articles in *Revue Maritime*, one of which was written by a Capitaine de Fregate Castex and published in January 1920.[70] The series, entitled "Synthese de la Guerre Sous-Marine" (Synthesis of the Submarine War), was cited by Lord Lee to support the British interpretation of French intentions, i.e., the submarines were not for defensive purposes, as the French claimed, but for offense and that the French favored a submarine war on commerce as a legitimate weapon in time of war. The Germans, wrote Castex, were absolutely justified in resorting to unrestricted submarine warfare and to neglect to do so would have been to commit a great blunder. The French writer concluded, stated Lee, with the observation that the instrument is finally at hand that would "overthrow for good and all the naval power of England."[71]

Lee stated that he hoped these were not the views of the French Government and that he expected immediate repudiation. He also observed that there was only one way that the French could effectively disavow these statements and that was by adopting the resolutions proposed by the American delegation. It was only through such action that they could remove the British feelings of apprehension and bitterness.

Admiral de Bon was the first to reply for France. He stated that he was glad to know the basis for the misunderstanding that had lasted so long between the two countries. The Castex article, asserted de Bon, "in no way represented ... the views of the French Navy. This article, written by a man of 'letters,' was, in the eyes of the French Delegation," a "monstrosity," and he formally repudiated it in the name of the French Navy.[72] Chairman Hughes then put aside any further discussion of the Root resolutions until the delegations had received advice from their respective governments.[73]

When the discussion of the Root resolutions resumed on 5 January, so did the battle of semantics. The only issue of real consequence arose when Japan questioned the resolutions on the use of submarines for blockading purposes.[74] Italy and Japan were both opposed to Balfour's position that prohibition was the intent of the resolution. As the "conflict raged without success," Roosevelt overheard a remark passed from Sarraut to de Bon to the effect that he would be glad to remain silent and let Italy and Japan fight France's battles.[75]

Despite the protracted debate on the Root resolutions, they were finally approved and adopted during the 15th and 16th meetings (5 and 6 January) of the committee[76] and incorporated into

a separate Treaty Regarding the Use of Submarines and Noxious Gases in Warfare.[77] Following the meeting of 5 January, Roosevelt had strongly urged Hughes to exclude them from the naval treaty because "... they deal with international law and suggest amendments to international law. [and] ... are not a generic part of our treaty which is composed of stipulations concerning matters over which we have no control.[78]

The submarine resolutions were laid before the entire Conference during the fifth plenary session (1 February) by Elihu Root and subsequently approved. Just prior to the reading of the treaty incorporating the resolutions to the assembled representatives, Root explained to Captain Rodgers, Chairman of the General Board, that the resolutions were designed to "meet public opinion with regard to [the] horrors and lawlessness of the Germans."

In his presentation before the Conference, Root pointed out that the treaty "undertakes further to stigmatize violations of these rules ... as violation of the laws of war which, as between these five great Powers and all other civilized nations who shall give their adherence thereto shall henceforth be punished as an act of piracy."[79] The acceptance of the treaty closed the subject of submarine limitation but was ratified by only four of the powers (France refused) and consequently never became binding. With the defeat of this treaty through lack of ratification, the only accomplishment of the Washington Conference regarding the limitation or restriction of submarines was eliminated. The Conference adjourned on 6 February 1922 after the adoption of 13 resolutions and seven treaties.

A major accomplishment of the Washington Conference was the replacing of the Anglo-Japanese alliance with a pledge between the United States, Britain, Japan, and France to respect each other's rights in their island possessions in the Pacific (Four Power Treaty, 13 December 1921). The nations represented at the Conference also agreed to respect China's independence and to uphold the principle of equal industrial and commercial opportunity in that country, thus formally accepting America's Open Door policy in China (Nine Power Treaty, 6 February 1922). A third achievement was, of course, naval limitations as outlined in the Five Power Treaty also approved on 6 February 1922. This agreement fixed the status quo in fortifications in the Western Pacific, established a capital ship construction holiday, made provisions for the scrapping of certain battleships and battle cruisers of the three major naval powers, set tonnage limitations for certain ship types (capital ships, aircraft carriers), limited the maximum gun caliber for cruisers, and established the naval strength ratio of 5:5:3:1.67:1.67 on aircraft carriers and capital ships.[80]

The major failure of the Washington Conference was its inability to reach a limitation agreement on the submarine, the key to the limitation of the remaining classes of surface warships. For the agreements at the Conference on battleships and aircraft carriers to be effective in reducing the chances of war, it was necessary that these two types of vessels be universally accepted as the key factor of seapower. Furthermore, limitation of these types only enhanced the combatant value of the other unlimited vessels. Capt. Dudley W. Knox observed that "It is very, very doubtful," whether this failure [to limit submarines] did not actually nullify the effects of limitation on battle ships and air-craft [sic] carriers ..."[81]

Any contribution the so-called submarine treaty might have made to the limitation of armaments would have been at best psychological, backed as it was only by "world opinion," for it made the submarine "an ordinary ship of war and took from it the stigma of

being a murderous and foul weapon."[82] As Admiral Sims wrote to Raymond L. Buell, author of *The Washington Conference*, any nation menaced by defeat and domination, "would use the submarine to save itself; . . . the 'tremendous power of public opinion' would not prevent it being used . . ."[83]

Another pessimistic evaluation of the treaty came from a paper written several days after the Conference ended by Adm. William V. Pratt of the U.S. Navy. The treaty, wrote Pratt, "is not practical [and] will not work." Pratt likened the submarine treaty to the Prohibition law, for it was forcing something on the majority of nations which they did not or would not want in war. The treaty, concluded the admiral, "is made to be broken, and this in itself leads to a disregard for the law . . .."[84]

Admiral Sims concurred in this negative evaluation of the submarine treaty. It would probably prove a failure, wrote Sims, "because it is really impossible to understand what it means . . .. It is useless to talk about the rules of warfare if the terms used are not accurately defined . . ."[85]

The rather unrealistic attempt to restrict the submarine by international law enforced only by world public opinion was hardly an adequate substitute for strict limitation by tonnage or size of the individual submarine or of a nation's submersible fleet. Lacking any regulations upon construction of this type of vessel, it was clear that those nations which chose to do so were free to engage in unlimited building programs not only in this category but in the other unrestricted classes as well. With competition underway anew, it soon became apparent that further international attempts to limit naval armaments were necessary if the naval arms race was to be halted.

The lessons from the attempts to limit the submarine at Washington should be abundantly clear. If a weapon lends itself to the protection or advancement of a nation's interests, meaningful limitation is doubtful. Similarly, if political differences between nations cannot be settled, there can be little genuine hope that important disarmament agreements can be reached.

BIOGRAPHIC SUMMARY

Professor Lawrence H. Douglas did his undergraduate work at the State University of New York at Oswego and earned his Ph.D. in social sciences from Syracuse University. He has served on the faculties of the University of Rochester; Nazareth College, Rochester; and is currently Associate Dean of Instruction and Director of Graduate Studies, Plymouth State College, Plymouth, N.H. Professor Douglas is a lieutenant commander in the U.S. Naval Reserve with 3 years experience in submarines.

NOTES

1. U.S. Dept. of the Navy. *Records of the General Board of the United States Navy. International Conferences and Discussions, Records and Publications, 1921-22.* Series I, Item 1, Policy and Discussion Book, 1921, Recommendation of the General Board, 15 July 1921, pars. 11, 13. Hereafter cited as U.S.N., Policy and Discussion Book.

2. *Ibid.*, Schofield draft, 23 August 1921.

3. *Ibid.*, H.P.H. Memorandum, 20 August 1921, p. 7.

4. U.S. Dept. of the Navy. *Records of the General Board of the United States Navy. International Conferences and Discussions, Records and Publications, 1921-22,* Series I, Item 2, Advisory Book, July 1921-February 1922, par. 16. Hereafter cited as U.S.N., Advisory Book, 1921-1922.

5. *Ibid.*, p. 20.

6. Memorandum, Capt. H.H. Bemis to General Board, 4 November 1921. *Ibid.*

7. *Ibid.*

8. The Theodore Roosevelt, Jr. Papers, "Limitations of Armaments," box 21, General Correspondence, 1922, Letters, v. I, p. 2, Library of Congress, Washington, D.C.

9. *Ibid.*, p. 3.

10. Letter, T. Roosevelt, Jr., to Philip C. Jessup, 10 August 1937. *Ibid.*, box 37, General Correspondence, 1936-37. This letter served as a point of clarification to Jessup, the author of *Elihu Root* (New York: Dodd, Mead, 1938).

11. *Conference on the Limitation of Armament, November 12, 1921-February 6, 1922* (Washington: U.S. Govt. Print. Off., 1922), pp. 26-66, 78-92. Hereafter cited as *Conference*.

12. *Ibid.*, p. 86. It is interesting to note that although Plan 1 had also allotted 54,000 tons to both Italy and France, no mention of it was made at this time.

13. *Ibid.*, p. 60. All vessels except battleships, aircraft carriers, and fleet support ships were considered auxiliaries at this time.

14. *Ibid.*, p. 102.

15. *Ibid.*

16. Letter, Capt. Sinclair Cannon to Director of War Plans, 17 November 1921. U.S.N., Advisory Book, July 1921-February 1922, p. 3.

17. *Ibid.*

18. *Ibid.*

19. Letter, General Board to Secretary of the Navy, 22 November 1921, No. 438. U.S.N., Final Action of General Board, July 1921-January 1922.

20. United States, *Papers Relating to the Foreign Relations of the United States, 1922* (Washington: U.S. Govt. Print. Off., 1922), v. I, pp. 135-36. Telegram, Premier Briand to Secretary Hughes, 18 December 1921. Both the Hughes' telegram of 16 December and Briand's reply were inserted into the records of the Conference during the course of the fourth meeting of the Committee on Limitation of Armament (22 December). Hereafter cited as *U.S., For. Rels. 1922.*

21. Raymond L. Buell, *The Washington Conference* (New York: Appleton, 1922), p. 83. See also memorandum of conversation between Secretary Hughes and French Representatives Sarraut, Jusserand, and de Bon, 19 December 1921, *U.S., For. Rels., 1922*, v. I, p. 137.

22. Roosevelt Papers, box 1, Diaries, 1921-24, v. I, pp. 40, 73.

23. Memorandum, General Board to Secretary of the Navy, 12 December 1921, No. 438, Ser. No. 1088-mm. U.S.N., Final Action of the General Board, July 1921-January 1922, p. 293.

24. Roosevelt Papers, box I, Diaries, 1921-24, v. I, p. 97.

25. *Ibid.*, p. 100.

26. *Ibid.*

27. *Ibid.*, p. 101.

28. *Conference*, p. 466.

29. *Conference*, p. 474; U.S. Congress, Senate, *Conference on the Limitation of Armament at Washington, November 12, 1921-February 6, 1922*, Senate Document 126, 67th Cong., 2d sess., 1922.

30. According to Lee's calculations, the major naval powers could, under the Hughes plan, increase their submarine tonnage by the following amounts: Japan, 21,800 tons; Great Britain, 9,500 tons; United States, 6,500 tons. Italy and France could also increase their fleets in proportion. *Conference*, p. 476. A discrepancy between the tonnage figures used by England and the United States was discovered and later corrected. The British had been using the surface displacement tonnage of submarines while the Americans had used the larger, submerged displacement figures.

31. *Ibid.*

32. *Ibid.*

33. *Ibid.*

34. *Ibid.*, p. 486.

35. *Ibid.*

36. *Ibid.*

37. *Ibid.*

38. *Ibid.*

39. *Ibid.*, pp. 490-92. The Advisory Committee report supposedly reflected American public opinion, but its findings appear to be quite similar to General Board memoranda found in U.S.N., Series I, Item 3, Final Action of the General Board, July 1921-January 1922, which could hardly claim to be a reflection of public opinion regarding the submarine. See Buell, note, p. 217.

40. *Conference*, pp. 492-98.

41. *Ibid.*, p. 498.
42. *Ibid.*, p. 500.
43. *Ibid.*, p. 518.
44. *Ibid.*, p. 520.
45. *Ibid.*, p. 538.
46. *Ibid.*, pp. 532-38.
47. *Ibid.*, p. 542.
48. *Ibid.*, p. 552.
49. *Ibid.*, p. 556. The tonnage possessed by those nations was: France, 31,391; Italy, 21,000; and Japan, 31,452. This proposal had been suggested to Hughes by Roosevelt earlier in the day at a subcommittee meeting. See Roosevelt Papers, box 1, Diaries, 1921-24, v. I, p. 106.
50. *Ibid.*
51. *Ibid.*, p. 562.
52. *Ibid.*
53. *Ibid.*
54. Memorandum, Admiral Pratt to Colonel Roosevelt, 27 December 1921. U.S.N., Advisory Book, July 1921-February 1922, p. 1.
55. *Ibid.*, p. 2.
56. *Ibid.*
57. *Ibid.*, p. 2-3.
58. Letter, Lord Balfour to Secretary Hughes, 27 December 1921. *U.S., For. Rels., 1922*, v. I, p. 143.
59. See Great Britain, *Parliamentary Debates* (House of Commons), Fifth Series, CCXXXVIII, 2099, 15 May 1930 and Dudley W. Knox, "The London Treaty and American Naval Policy," *United States Naval Institute Proceedings*, August 1931, pp. 1079-1088.
60. Knox, p. 1081.
61. *Conference*, p. 570.
62. *Ibid.*, p. 572.
63. *Ibid.*, p. 574.
64. *Ibid.*, p. 576.
65. This attempt to limit the submarine through international law was in keeping with Roosevelt's idea to have restrictions of some kind if limitation failed and also in accordance with the recommendation of the General Board noted in Memorandum No. 438, Ser. No. 1088-dd of 15 November 1921.
66. *Conference*, p. 596.
67. *Ibid.*, p. 598.
68. *Ibid.*, p. 618.
69. Roosevelt Papers, box 1, Diaries, 1921-1924, v. 1, III.
70. At the time the article was written, Castex was chief of a bureau on the French Naval Staff and at the time of the Conference was Chief of Staff of the Admiral of the Second Division in the Mediterranean.
71. *Conference*, p. 654.
72. *Ibid.*, pp. 658-660.
73. *Ibid.*, p. 668. On 31 January 1922, at the 20th meeting of the Committee on Limitation of Armament, there occurred a further exchange between France (Jusserand) and England (Lee) over the Castex article. Jusserand claimed that the British translation and interpretation of the article was imperfect and misleading and had done France an undeserved injustice. The debate was ended by Hughes when he moved the question of final approval of the naval treaty. See *Conference*, pp. 820-834.
74. Roosevelt Papers, box 1, Diaries, 1921-1924, v. I, p. 126.
75. *Ibid.*
76. *Ibid.*, pp. 684-740. It is probable that the French felt constrained to approve the Root resolutions in an attempt to dispel the negative public image engendered by the submarine debate and the Castex affair. See Buell, p. 223.
77. See *Conference*, pp. 1605-1611, for the complete treaty.
78. Roosevelt Papers, box 1, Diaries, 1921-1924, v. *I*, p. 127.
79. *Conference*, p. 268.
80. For the text of the various resolutions and treaties see *Conference*, pp. 1570-1658 or U.S., Senate Document 126, pp. 869-910.
81. Dudley W. Knox, *The Eclipse of American Sea Power* (New York: American Army and Navy Journal, December 1922), p. 96.

82. Rolland A. Chaput, *Disarmament in British Foreign Policy* (London: Constable, 1927), pp. 121-122.

83. Letter, Adm. William S. Sims to R.L. Buell, 9 May 1923. *The Papers of Rear Admiral William S. Sims*, Series I, folder SS. Manuscripts Division, Library of Congress, Washington, D.C. Hereafter cited as *Sims Papers*.

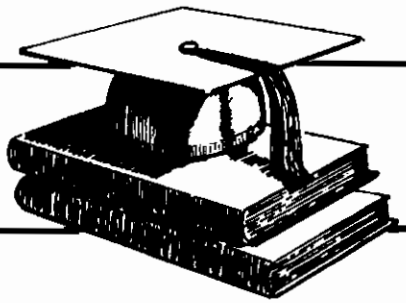
84. *The Papers of Admiral Hillary Pollard Jones*, box 1, paper by Adm. William V. Pratt, "An Attempt to Interpret the Treaty," 13 February 1922, pp. 10, 14, Manuscripts Division, Library of Congress, Washington, D.C.

85. Letter, Adm. William S. Sims to Sir Graham Bower, 26 July 1923, *Sims Papers*, Series J, folder SS.

Ψ

. . . a mode of warfare which they who commanded the seas did not want, and which if successful would deprive them of it.

Lord St. Vincent: Comment on William Pitt's negotiations with Robert Fulton for construction of a submarine, October 1805



PROFESSIONAL READING

Collins, John M. *Grand Strategy: Principles and Practices.* Annapolis: Naval Institute Press, 1973. 338p.

At long last someone has written a book which contains a concise, no nonsense compendium of the terms, techniques, and considerations one finds frequently used and often poorly defined, if defined at all. Concepts of deterrence, retaliation, flexible response, and limited war are some of the items included in this compendium, which also contains a very useful glossary. In addition, there are brief, but thorough, outlines of U.S. policy and strategy in the major geographic regions of the world. This succinct, but encyclopedic, treatment of a host of disparate terms, concepts, and policies is the great strength of this book. Alone it would make the book valuable.

In addition, the author has provided a more than adequate, but by no means exhaustive, survey of the relevant and significant literature in the field. An annotated bibliography, containing most of the standard works, will be helpful to the practical military man or to the layman. Joseph C. Wylie's *Military Strategy* is properly included. Unfortunately, Henry E. Eccles' *Military Concepts and Philosophy* is not. This omission is inexcusable in a book purporting to discuss the abstract as well as the practical aspects of grand strategy.

The terms "grand strategy" and "national strategy" are used interchangeably. "National strategy" is the American equivalent of the term "grand strategy," which is found in British and European literature. While this interchange of one term for the other may be confusing to a degree, it does not obscure the meaning. "National strategy fuses all the powers of a nation, during peace as well as war, to attain national interests and objectives." This forthright statement from the text does not differ significantly with the author's definition in the glossary of grand strategy: "The art and science of employing national power under all circumstances to exert desired types and degrees of control over the opposition by applying force, the threat of force, indirect pressures, diplomacy, subterfuge and other imaginative means to attain national security objectives."

The point of this somewhat tedious concern with definitions is that the author has clearly in mind that grand (or national) strategy is concerned primarily with the direction of all of the elements of national power to attain objectives in accordance with national policy. The nature of strategy is correctly seen as comprehensive. The objective of strategy is control for a purpose.

The great virtue of the book lies in its enumeration and terse descriptions of the practical elements of grand strategy. The author's impressive grasp of the nuts and bolts particulars is evident. However, he falters when he moves from the realm of practice to that of principles or theoretical considerations. *Grand Strategy* points the way to the analytical fundamentals and reveals an intuitive grasp of them. But they are not stated specifically. For

example, the "principles of war" (purpose, initiative, flexibility, concentration, et cetera) are correctly cited as a "collection of basic considerations accumulated over the centuries." They are only guides or maxims, and they belong in the category of rules of thumb. They are not fundamentals of strategic analysis.

The Vietnam war is cited as a case study in grand strategy. It is a brilliant summary of the policies, strategies, and tactics employed by the United States, the South Vietnamese, and both the Vietcong and the North Vietnamese. It is dispassionate and as objective as possible, which clearly distinguishes it from the usual academic and pseudo-intellectual writings on the subject. This masterful summary concludes with a plea to return to the fundamentals of strategic analysis. "The Principles of War" are trotted out as a tool to evaluate strategic performance. The tool is used well, but it is too crude to be used effectively.

What better analytical tool is there? Eccles in his *Military Concepts and Philosophy* clearly states that, among other things, strategic realism requires (1) challenging assumptions, (2) analyzing objectives, and (3) appraising expectations. In this sense an assumption is something so vital to the success or failure of whatever is proposed, that if it is invalid, failure will result. What were the assumptions upon which U.S. participation in Vietnam was based? Did these assumptions change as the course of our involvement proceeded?

What precisely were the U.S. objectives in Vietnam? They are clearly listed in the text, but they are not analyzed in terms of immediate, intermediate, and long-range objectives. Did objectives change as the situation changed? Did our actions change as our objectives changed?

Were the expectations of American policymakers reasonable in the long course of our involvement? If not, why not? The text does provide some answers. In this and other respects the author is close to the mark, even though the reader is not told how expectations can be correctly appraised.

These criticisms in no way invalidate the value of this exceptional statement. Rather, they indicate that more analytical work must be done by the military intellectual who seeks to penetrate the inner nature of war and the theory of strategy for the purpose of making sound military decisions. Indeed, these are the fundamentals to which the author refers in his conclusion.

In discussing American concepts of collective security, the correct definition of collective security is given: "a global security system based on the agreement of all or most states to take common action" in specified circumstances. This definition is dismissed as purist. However, it is also accurate. The system commonly referred to as collective security is essentially an alliance system directed against the Soviet Union and, to some extent, against Red China. It is not qualitatively different from other alliance systems in other historical periods. Unfortunately, *Grand Strategy* continues the current sloppy use of the term.

Despite a reviewer's somewhat niggling criticisms, the essential message of *Grand Strategy* comes through loud and clear: Strategy is comprehensive. Factors which must be considered are geography, character of the armed forces, arms control, economic and fiscal constraints, science and technology, national character and attitudes, in addition to the specific circumstances of the strategic environment. Each of these factors has been awarded a separate chapter. These factors cannot be fed into a computer in hopes of producing a useful or viable strategy. Taken with good sense, good judgment, intellectual integrity, a clear sense of purpose and direction, and a grasp of the fundamentals of strategic analysis, a reasonable,

rational, and, hopefully, successful national strategy can be devised and executed.

The author is quite correct when he says, "Strategy formulation always has been and always will be an art as well as a science."

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Corson, William R. *Consequences of Failure.* New York: W.W. Norton & Co., 1974. 215p.

Consequences of Failure is an echo of the aftermath of the Vietnam war. William Corson has successfully avoided a head-on confrontation with the open question of *why* we failed and instead has dealt with what war-related problems have been created for various segments of our national life.

A writer sympathetic to the traumatic nature of such affairs, the first part of Corson's book seeks to soothe the attendant bitterness, much like a doctor trying to comfort a nervous and confused patient. He does this by removing the immediate cause of ill feeling, the particulars of Vietnam. He instead concentrates on the failures of other great powers: Rome, Imperial Spain, and England in the American colonies and the Irish Revolution of 1916-22. He makes it clear to the reader that the United States is not the first nation to suffer such a failure and that when put in the proper perspective, failure may not be as disastrous as first appears.

Corson has also used the historical vehicle both to illustrate particular points that he later attributes to the American scene and to create possible American scenarios. For example, the shoddy treatment received by British troops after their failure in the Hundred Years' War and the unwillingness of the British Government to confront certain war-related problems within the "system" created the roots of an unwieldy social problem that ultimately led to the Wars of the Roses—civil war. The warning to America, though never openly stated, is clearly implied.

The second part of Corson's book concentrates on the specific problems that have been created by Vietnam for the American military, economy, and public. The military, as a microcosm of society and an area in which Mr. Corson has considerable personal experience, is singled out for particular attention. His observations are far from flattering. An ever-expanding drug abuse problem, dissent and disillusionment over the nature of America's role and the methods used to carry out that role, the breakdown of civilian and military leadership, and the accelerated level of racial tension are all discussed individually and are directly related to the Vietnamese failure.

Just as every great success must have its heroes, so a failure must have its villains. *Consequences of Failure* leaves little doubt as to the identity of this unfortunate group. It consists of those who saw the possibility of failure and, either through knavery or self-delusion, sought to cover it up and those who attempted to substitute artificial success for reality by using such things as the "body count" for a yardstick. Corson does not limit membership in this group to the ones who "perpetuated" the war, but includes those who should have acted far sooner to reduce the problems of drug abuse and racial conflict. Mostly through the efforts of these people to obscure or misrepresent their own nonperformance, Corson feels the great majority of public confidence in government was replaced by cynicism.

The book's conclusion reflects an equally pessimistic note. Recognizing a tendency to forget Vietnam that has been accelerated by the preoccupation with Watergate, Corson has described the reaction of American society to the phenomenon of failure as similar to that of a man with all the warning signals of cancer but who refuses to see a doctor

for fear of confirming what he already knows. In the case of American society going to see a doctor acknowledges the fact that we have failed, but it also represents the first step toward recovery. Clearly the Nation cannot ignore failure, and the sooner remedial action is begun the better. What were comfortable and familiar ways ultimately led to disaster, and if we are to profit from the experience, we must be willing to make the sacrifices necessary to repair the great rifts in our national fabric.

Mr. Corson has taken upon himself an incredibly broad topic and has dealt with it in somewhat less than 200 pages. Needless to say, many of his observations and conclusions are general and a bit simplistic, but his basic point is well taken. A national failure shapes policy just as surely as does success, and future decisions must be made with that in mind. If we are to proceed in any sort of viable manner, we must first repair the damage. *Consequences of Failure* is a good starting point in the assessment of what choices are available for that repair.

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Heggoy, Alf A. *Insurgency and Counterinsurgency in Algeria*. Bloomington and London: Indiana University Press, 1972. 327p.

Dr. Alf A. Heggoy, an associate professor of history at the University of Georgia, has written a perceptive, scholarly, and timely study of the Algerian nationalist rebellion during the 1954-1958 period. This first-rate study, financed in part by the Army Research Office in Durham, N.C., is of great value to social scientists, professional military personnel, lay readers, and scholars alike. The book, divided into 16 chapters, complete with 10 charts, 8 maps, a glossary of French and Arabic terms, a list of abbreviations for French terms, 12 pages of bibliography, 39 pages of footnotes, and an index, can be used equally well as a reference work on insurgency and counterinsurgency. Dr. Heggoy's study is made especially impressive by his utilization of unpublished documents, his fastidious documentation and footnoting, and his personal experience in Algeria. The son of a missionary who served in Algeria for 30 years, Dr. Heggoy received some of his education in France and returned to Algeria during his school vacations. His understanding of the Algerians, their manners, their aspirations, and their frustrations is quite apparent in the book and adds immeasurably to the authenticity and quality of insight that the reader will find.

In the first three chapters, Professor Heggoy traces the political history of Algeria and its Moslem and European inhabitants from 1830, when it became a French possession, until the outbreak of the rebellion in November 1954. The author lucidly explains the political mobilization and maturation of the Algerians, both in Algeria and in France (where they were migrant workers), and the creation of the Moslem political elites that eventually led the revolution.

French policy in Algeria was largely geared to accommodate the interests of the French settler rather than the Moslem, and the attendant result was that an increasing number of Algerians became estranged from France, as demonstrated by the 1945 uprisings. Beginning with legislation in 1947, the French Government began to replace its time-honored colonial policy of assimilation with one of autonomy. (p. 30) Yet, asserts the author, "The French failure to effect reforms in Algeria before the situation there became crucial cost dearly in terms of local popularity. By and large, the natives [that is, the Moslems] had lost faith in the government of France even before [the outbreak of the rebellion in] 1954." (p. 99)

Consequently, the French Army found it difficult to develop a counter-insurgency capability which could not only encapsulate and destroy the Algerian nationalist movement but also win the allegiance of the Algerian masses. Tragically, torture and terrorism were used by both the French Army and the Algerian National Liberation Army to cow the Algerian masses into filling their demands. Professor Heggoy sagely observes that "It was in the realm of the peasant and his mind, not in terms of power or established law, that the [Algerian] nationalists challenged France." (p. 173)

Although the French forces did successfully meet the military challenge of the National Liberation Army, they ultimately "failed because their government lost the desire to hold Algeria. The army blamed the [previous] defeat in Indochina on the politicians, and blamed them for the situation in Algeria. . . . The important decisions were political decisions reached after [the fall of the Fourth French Republic in] 1958 and imposed by Charles de Gaulle." (p. 259)

Along with the loss of political will in metropolitan France, the French Army was handicapped, in Dr. Heggoy's judgment, by its lack of intimate knowledge of the cultural milieu of the Algerians, the knowledge that gave the nationalist forces their cutting edge and staying power. (pp. 96 and 207) Finally, the author has observed that the French Army lost the battle for public opinion, both in the UN and in the international press. These lessons, although exemplified by France, are significant for all Western democracies in an era when large citizen armies are employed to wage subconventional warfare in areas where the insurgents and counter-insurgents are separated by huge human moats of cultural and/or racial differences.

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